

UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF NEW JERSEY
CIVIL ACTION NO 16-MD-2738 (FLW) (LHG)

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IN RE JOHNSON & JOHNSON : DAUBERT HEARING
POWDER PRODUCTS MARKETING, : JULY 22, 2019
SALES PRACTICES. : VOLUME 1
----- :

CLARKSON S. FISHER UNITED STATES COURTHOUSE
402 EAST STATE STREET, TRENTON, NJ 08608

B E F O R E: THE HONORABLE FRED A. WOLFSON,

A P P E A R A N C E S:

BEASLEY ALLEN, ESQUIRES
BY: P. LEIGH O'DELL, ESQUIRE (ALABAMA)
MARGARET M. THOMPSON, ESQUIRE (ALABAMA)
-and-
ASHCRAFT & GEREL, ESQUIRES
BY: MICHELLE A. PARFITT, ESQUIRE (VIRGINIA)
-and-
MOTLEY RICE, ESQUIRES
BY: DANIEL R. LAPINSKI, ESQUIRE (NEW JERSEY)
On Behalf of the Plaintiffs Steering Committee

DRINKER, BIDDLE & REATH, ESQUIRES
BY: SUSAN M. SHARKO, ESQUIRE (NEW JERSEY)
JULIE L. TERSIGNI, ESQUIRE (NEW JERSEY)
-and-
SKADDEN, ARPS, SLATE, MEAGHER & FLOM, ESQUIRES
BY: JOHN H. BEISNER, ESQUIRE (WASHINGTON, D.C.)
-and-
PROSKAUER ROSE, ESQUIRES
BY: BART H. WILLIAMS, ESQUIRE (CALIFORNIA)
OM ALLADI, ESQUIRE

(Continued.)

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VINCENT RUSSONIELLO, RPR, CRR, CCR
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A P P E A R A N C E S C O N T I N U E D :

WEIL, ESQUIRES

By: ALLISON M. BROWN, ESQUIRE

On behalf of Defendant Johnson & Johnson

SEYFARTH SHAW, ESQUIRES

BY: THOMAS L. LOCKE, ESQUIRE (WASHINGTON D.C.)

On Behalf of Defendant Personal Care Products Council

1 M O R N I N G S E S S I O N

2 (In open court.)

3

4 THE DEPUTY CLERK: All rise.

5 THE COURT: Thank you. I do have the sign-in
6 sheet. If I could just have the appearances at
7 counsel table, who will be participating in the
8 hearing for plaintiffs, please.

9 MR. LAPINSKI: Your Honor, good morning.

10 Good morning, your Honor.

11 Daniel Lapinski, Motley Rice, on behalf of
12 plaintiffs.

13 MS. O'DELL: Good morning, your Honor.

14 Leigh O'Dell on behalf of the plaintiffs
15 Steering Committee.

16 MS. THOMPSON: Good morning, your Honor.

17 Margaret Thompson, Beasley Allen.

18 MS. PARFITT: Good morning, your Honor.

19 Michelle Parfitt, Ashcraft & Gerel.

20 MR. WILLIAMS: Good morning, your Honor.

21 Bart Williams on behalf of defendant Johnson &
22 Johnson.

23 MR. ALLADI: Good morning, your Honor.

24 Om Alladi on behalf of defendant Johnson &
25 Johnson.

1 MS. BROWN: Good morning, your Honor.

2 Allison Brown, Weil, Gotshal for Johnson &
3 Johnson.

4 MS. SHARKO: Susan Sharko, Drinker Biddle, for
5 Johnson & Johnson defendants.

6 MS. TERSIGNI: Julie Tersigni, Drinker
7 biddle, for the Johnson & Johnson defendants.

8 MR. BEISNER: Good morning, your Honor.

9 John Beisner, Skadden, Arps, for the Johnson &
10 Johnson defendants.

11 MR. LOCKE: Good morning, your Honor.

12 Thomas Locke, Seyfarth & Shaw, for Personal
13 Care Products Council.

14 (Brief recess is taken.)

15 MR. LAPINSKI: Our first witness, we would
16 like to call Dr. Ghassan Saed.

17

18 **GHASSAN SAED**, called as a witness on behalf of the
19 plaintiffs, having been first duly sworn, testified as
20 follows:

21 DIRECT EXAMINATION

22

23 BY MR. LAPINSKI:

24 Q. Dr. Saed, good morning. We are here today as
25 part of the Daubert hearing. This is not a trial.

1 We're here today not for determinations, whether the
2 opinions you offered are right or wrong. We're here
3 to assist the Court in helping her Honor to decide
4 whether or not your testimony should be presented to a
5 jury.

6 I want to speak with you today and focus on a
7 couple of different areas which are your
8 qualifications, the reliability of the methods you
9 used in reaching your opinions and whether or not your
10 opinions have relevance. Are you ready?

11 A. Ready.

12 Q. Dr. Saed, you have a binder in front of you.
13 I'm going to ask you to take a look at the first
14 exhibit in that binder. If you can identify that
15 document?

16 A. This is my expert report.

17 Q. Is there anything that's part of Exhibit 1 in
18 addition to your expert report, Dr. Saed?

19 A. Yes. It's my expert report, my CV.

20 Q. Dr. Saed, the second tab, can you please
21 identify what the second tab of the document is?

22 A. The second tab is my expert report that I made
23 some corrections in.

24 Q. When did you make those corrections, Dr. Saed?

25 A. The date of my second deposition.

1 MR. LAPINSKI: For the record, your Honor,
2 that was corrections that were made prior to his first
3 deposition, and that was marked as Exhibit 11 during
4 Dr. Saed's deposition. We have that there because it
5 was used during the deposition as compared to the
6 report originally provided to the Court.

7
8 BY MR. LAPINSKI:

9 Q. Dr. Saed, I want to speak about your
10 qualifications. Would you provide an overview of your
11 current professional practice.

12 A. Currently I'm an Associate Professor at the
13 School of Medicine, Department of OB/GYN at Wayne
14 State Street.

15 I'm also an Associate Professor in the
16 Department of Oncology at Karmanos Cancer Institute,
17 both in Detroit, Michigan.

18 I'm also the Director of ovarian cancer
19 research in the Department of OB/GYN at Wayne State
20 University, and a member of Tumor Biology Program at
21 Karmanos Cancer Institute, in the same place.

22 Q. Doctor, can you describe your role as the
23 Director of Cancer Biology Research.

24 A. Yes. I started this lab when I was hired,
25 recruited to Wayne State University in 1998, and this

1 lab basically studies the effect of oxidative stress,
2 inflammation in the causation of diseases, especially
3 cancer. And we have -- also part of this lab that I'm
4 responsible for, we train medical residents, clinical
5 fellows that rotate around the department, and also
6 Ph.D. students from departments within Wayne State
7 University School of Medicine that I also hold a
8 secondary appointment to.

9 I hold a secondary appointment in the
10 Department of Physiology and Anatomy, and in the
11 Department of Biology where I oversee Ph.D. students.
12 They come and do the work with me.

13 Q. Doctor, at any given time how many people are
14 working in your lab?

15 A. Typically, in any given instant, four to six
16 people working in the lab.

17 Q. Doctor, could you explain to the Court what
18 "oxidative stress" is and its relationship to ovarian
19 cancer?

20 A. Oxidative stress is the balance between enzymes
21 that produce oxidants in the body and enzymes that
22 remove oxidants from the body.

23 To keep this balance is very critical. If
24 this balance is altered, it is an indication of
25 diseases. I have shown in the past 25 years of my

1 experience this balance is altered in ovarian cancer.
2 Also other people have shown a different type of
3 cancer. Balance between oxidants and antioxidant is
4 called the "redox balance."

5 Your Honor, this is like you have hormones
6 that increase blood sugar, hormones that decrease
7 blood sugar. The balance between the two is what
8 maintains blood sugar within normal just as an example
9 to simplify it.

10 Q. Dr. Saed, would you describe for the Court your
11 professional experience as it relates to oxidative
12 stress and ovarian cancer?

13 A. I have published over 140 peer-reviewed articles
14 in different specialty journals. Over 50 of these
15 articles are specifically related to oxidative stress
16 and ovarian cancer.

17 Q. Have you done specific research in this area as
18 well?

19 A. Yes. My lab is focussed on studying oxidative
20 stress, inflammatory markers in the pathogenesis in
21 the causation of ovarian cancer.

22 Q. Has any of your work been published in books?

23 A. Yes. I was just -- I just published a book. I
24 was invited to participate in a book chapter in this
25 book. The book is called "The Pathogenesis of Ovarian

1 Cancer From Pathogenesis to Treatment," and I
2 participated in a chapter. The chapter title is "New
3 Insights Into the Pathogenesis of Ovarian Cancer in
4 Relation to Oxidative Stress."

5 Q. Doctor, have you published review articles in
6 the area of oxidative stress and ovarian cancer?

7 A. Yes. I just published a review article that
8 just came out in the GYN Oncology, which is a
9 prestigious journal for our research. And also I have
10 other review articles in the same area.

11 Q. Doctor, is there more significance to the
12 publication of a review article as compared to a
13 simple publication in a journal?

14 A. Yes. Usually, the review articles are written
15 by experts in the field, where regular manuscripts are
16 written by scientists or anyone.

17 Q. How many different times have you written a
18 review article on the topic of "oxidative stress"?

19 A. Maybe around nine or ten.

20 Q. Have you ever lectured on the topic of oxidative
21 stress in ovarian cancer?

22 A. Yes. Many times. I was an invited speaker at
23 the grand rounds at the national level, lectures in
24 the hospitals, and at the national level, also
25 international level.

1 Q. Have you ever done work on behalf of medical
2 journals?

3 A. Yes. I act as a reviewer to several journals
4 including GYN Oncology, Reproductive Sciences,
5 American Society For Reproductive Medicine, and many
6 others.

7 MR. LAPINSKI: Your Honor, do you have any
8 questions with respect to the Doctor's qualifications.

9 THE COURT: I do not.
10
11

12 BY MR. LAPINSKI:

13 Q. Doctor, you had mentioned you had recently
14 published in Gynecologic Oncology a review article.
15 Is this the review article you were referring to that
16 is on the screen?

17 A. Yes.

18 Q. Doctor, is this the review article that you were
19 referring to that was published in Gynecologic
20 Oncology?

21 A. Yes.

22 Q. What's the title?

23 A. It's "Updates of the Role of Oxidative Stress in
24 the Pathogenesis of Ovarian Cancer."

25 MR. LAPINSKI: Your Honor, for your reference

1 a copy of this article is in the binder, and it was
2 previously marked as PSC GC OPP, Exhibit 113.

3 BY MR. LAPINSKI:

4 Q. Dr. Saed, in the title of the article, what does
5 "pathogenesis" mean?

6 A. It means causation of ovarian cancer.

7 Q. In lay terms, what is this review article about?

8 A. The take-home message from this review article
9 is that oxidative stress plays a very important and
10 essential role in causation of ovarian cancer.

11 Q. Doctor, in the highlighted section, the first
12 bullet, what's the first bullet in the highlight
13 section of your article?

14 A. It says: "Oxidative stress plays an essential
15 role in the pathogenesis of ovarian cancer."

16 Q. What's the purpose of the highlight section in
17 journal articles?

18 A. Take-home message to readers.

19 Q. Doctor, if you could turn to your expert report
20 page if 20. Doctor, what are the six primary opinions
21 that you are offering in this litigation?

22 A. I am offering, first of all, that Johnson &
23 Johnson baby powder is not inert. It has a biological
24 activity. This biological activity includes causation
25 of inflammation. It increases inflammation. It

1 increases the redox balance, the balance that keeps
2 oxidants antioxidants in balance. It changes the
3 redox balance in normal surface ovarian cells to mimic
4 the profile that we see and we observe in ovarian
5 cancer cell lines.

6 Also, Johnson & Johnson Baby Powder exposure
7 can elevate CA-125, which is a marker of inflammation,
8 and it is a biomarker for ovarian cancer for
9 monitoring prognosis and treatment. And, also, it
10 induces, which is very important, changes in the DNA
11 by inducing mutations in the DNA, and not any random
12 mutation; these mutations were detected in these key
13 enzymes that regulate the oxidants and antioxidants of
14 the cell.

15 It is based on all that, it is my opinion, and
16 based on the literature, and based on my 25 years plus
17 experience in this field, it is my opinion that
18 exposure to talcum powder at the cellular level will
19 induce cells to transformation.

20 Q. When you say "induce cells to transformation,"
21 what do you mean by that?

22 A. It means, because we have done assays that are
23 indicative of cells undergoing the transformation
24 process, and these tests are looking at cell
25 proliferation and cell apoptosis; and when we did

1 those two tests we found exposure to normal cells of
2 Johnson & Johnson Baby Powder severely increased the
3 proliferation of cells which is uncontrolled cell
4 division and decreased simultaneously apoptosis, which
5 is the natural cell death process for elimination of
6 bad cells, and that is an indication of cells
7 undergoing transformation process.

8 Q. Dr. Saed, are you offering an opinion in this
9 case that Johnson's Baby Powder causes ovarian cancer?

10 A. Yes.

11 Q. Doctor, are you also offering an opinion in this
12 case that exposure to Johnson's Baby Powder worsens
13 the prognosis for women who already have ovarian
14 cancer?

15 A. Yes.

16 Q. You touched on it a little bit. But upon what
17 are your opinions that you are offering in this case
18 based?

19 A. They are based on the 2 years of research that I
20 spent looking at the effect of exposure of Johnson &
21 Johnson Baby Powder to normal ovarian cells and
22 compared that effect to what we know, what others know
23 about the effect on ovarian cancer cancer cells. So
24 we compared the two.

25 And also in other published literature out

1 there.

2 Q. Doctor, do you need to conduct additional
3 research to support the opinions that you are offering
4 in this case?

5 A. No.

6 Q. Why is that?

7 A. In vitro studies, which I did, they are the gold
8 standard for trying to figure out the mechanism of the
9 effect of any agent, exposure to any agent in cell
10 culture.

11 Q. Would you explain to the Court what an in vitro
12 study is?

13 A. In vitro study it is using cell culture petri
14 dishes outside the body in the lab.

15 Q. You've referenced the term "biologic activity."
16 Would you explain what you mean by "biologic
17 activity."

18 A. Biological activity is induction by exposure to
19 Johnson & Johnson Baby Powder includes all what I've
20 just listed. It induces inflammation; it induces
21 proliferation; it inhibits cell death; changes the
22 redox balance of the cell that mimics what we see in
23 ovarian cancer cells that we studied for 25 plus
24 years.

25 MR. LAPINSKI: Your Honor, if I can approach

1 the witness in order to be able to hand him an
2 exhibit.

3 THE COURT: Yes.

4

5 BY MR. LAPINSKI:

6 Q. Dr. Saed, I've just handed you two books. Would
7 you describe for the Court what those books are.

8 A. Those are lab notebooks.

9 Q. Are they the laboratory notebooks that contain
10 your information related to the research you have done
11 on talcum powder?

12 A. Yes.

13 MR. LAPINSKI: Your Honor, those notebooks
14 were previously marked at his initial deposition as
15 Exhibits 2 and 3.

16 THE COURT: Okay.

17 BY MR. LAPINSKI:

18 Q. Dr. Saed, if you would please go to the binder
19 that we have. If you would look, Dr. Saed, at Exhibit
20 PSC SAED OPP Exhibit I.

21 A. I'm here.

22 (Pause.)

23 Q. Dr. Saed, what is the document that you are
24 currently looking at?

25 A. This is the first section of the lab notebook.

1 This is the very initial study that we conducted using
2 talcum powder from Fisher Scientific.

3 THE WITNESS: Your Honor, here we used Fisher
4 Scientific talcum powder, and we used this powder to
5 treat three different cancer cell lines -- ovarian
6 cancer cell lines, one normal macrophage, and one
7 normal ovarian epithelial cell line.

8 Q. What type of test did you run related to this
9 section of your laboratory notebooks, Doctor?

10 A. Here we did different doses of the talcum
11 powder. We used 20, 100, and a thousand microgram per
12 milliliter, and then we measured different markers of
13 oxidative stress. We measure -- in the table we have
14 a list of all the markers that we tested in this
15 study.

16 Now, the outcome of the study, your Honor, is
17 published in an abstract that we submitted to the
18 Society For Reproductive Investigation, and it was
19 presented in their meeting March of 2018.

20 MR. LAPINSKI: Your Honor, the March 2018
21 abstract that was presented at the Society For
22 Reproductive Investigation is in your binder as PSC
23 SAED OPP Exhibit J.

24 THE COURT: This isn't one of the journals you
25 identified as serving as a review on, is it?

1 THE WITNESS: Yes.

2

3 BY MR. LAPINSKI:

4 Q. Dr. Saed, if you would turn to the next section
5 of the binder which is PSC SAED OPP Exhibit G.

6 A. Yes.

7 Q. If you could please describe for the Court what
8 that document is.

9 A. Here we tried different time points. We used
10 24 hours, 48 hours, 72 hours, with higher doses of the
11 powder. And then we looked at CA-125 levels, which is
12 the inflammatory level biomarkers for ovarian cancer,
13 and we found that exposure of normal cells to talc
14 induces CA-125 levels, and we published this -- we
15 presented this in an abstract in March 2018 in the SRI
16 meeting, the Society for Reproductive Investigation
17 meeting.

18 Q. What is the significance of an increase in the
19 CA-125 levels?

20 A. It is very significant because it is a marker of
21 inflammation, and it is a cancer antigen marker. And
22 if it's increased upon exposure with talcum powder, it
23 is an indication the cells are going into
24 inflammation.

25 MR. LAPINSKI: Your Honor, for your reference,

1 the abstract that was presented at the SRI meeting
2 related to CA 125 is in the back of your binder, and
3 that has been marked as PSC SAED OPP Exhibit L.

4 Q. Dr. Saed, in your binder, if you would take a
5 look at PSC SAED OPP Exhibit H.

6 A. Yes.

7 Q. What is that document, Doctor?

8 A. Here, your Honor, we did only Johnson & Johnson
9 Baby Powder, and here we looked at three cancer cell
10 lines: ovarian cancer cancer cell lines and three
11 normal ovarian epithelial cell lines, and we looked at
12 doses that was zero, five, 20 and 100, microgram per
13 milliliter. And then we exposed cells to 72 hours,
14 and we looked at different markers of oxidative
15 stress, inflammation, apoptosis, proliferation, cell
16 division, and genetic mutations.

17 Q. Doctor, were the results of this research
18 published?

19 A. Yes.

20 Q. Where and when were they published?

21 A. It is published now in a manuscript for Society
22 For Reproductive Sciences. It is in the Reproductive
23 Sciences Journal.

24 THE COURT: Let me ask one question with
25 regard to the lab notebooks.

1 The majority of the writing in here, is it
2 yours or one of your lab assistants?

3 THE WITNESS: One of my lab assistants.
4
5

6 BY MR. LAPINSKI:

7 Q. Dr. Saed, in regard to the last three documents,
8 can you please describe for the Court what these
9 documents represent?

10 A. It represents the work that we did, the testing
11 of the effect of talcum powder on Johnson & Johnson
12 Baby Powder on different cell markers.

13 Q. Doctor, could you please describe how your
14 laboratory maintains the laboratory notebooks?

15 A. Yes.

16 Nowadays all our instruments are computerized,
17 your Honor. So all data that we collect, it goes from
18 the computer of the assay machine to a main computer
19 transferred to an Excel sheet, because we have done
20 this many times for many, many years. We have people
21 coming and trained in our lab. So everything in the
22 spreadsheet we transferred the data from the computer
23 of the machine to the spreadsheet. Everything is
24 electronically printed out. We print it out for the
25 record, and we glue it in that notebook. Nobody

1 touched the data. Methodology part is what's
2 handwritten or sometimes stuck as a procedure in the
3 lab notebook.

4 Q. Dr. Saed, you referenced the handwriting in the
5 methodology parts of the lab notebooks. The methods
6 that you employed during the work and the experiments
7 you did related to these lab notebooks, are those
8 methods, methods that you employed in the past?

9 A. Yes. These are established methods in our
10 laboratory and also very well known to the scientific
11 research community. They have been out for several
12 decades now. We use them for clinical testing.

13 For example, ELISA is a very established
14 clinical technique that doctors ask. For example,
15 CA-125. It is clinically standardized not just for
16 research purposes. These are very well known
17 established methods. It has been there for decades.

18 Q. Doctor, you touched on it a little bit, but in
19 regard to the data that was compiled for purposes of
20 your research, could you please explain that data
21 process?

22 A. Yes.

23 As I said, our machines now are computerized.
24 So you perform the assay using the machine. The
25 machine gets the data in the computer. We export the

1 data from the computer. The data is transformed into
2 a spreadsheet that has all the formulas, because we
3 have done this several times, and the spreadsheet will
4 calculate -- because it has all the formulas, it will
5 compute all the numbers.

6 What we do, just to confirm, we print them out
7 from the computer and stick them in that notebook.

8 Q. Doctor, is there any data from your talcum
9 powder experiments that has been manually entered into
10 the laboratory notebooks?

11 A. No.

12 Q. I would like to be able to take a look at page
13 49 of the laboratory notebook.

14 MR. LAPINSKI: Your Honor, the laboratory
15 notebooks have handwritten numbers at the bottom of
16 the pages. You can use that for your reference.

17 Q. Doctor, you see the image of page 49 up on the
18 screen. What does the data on this page represent?

19 A. Here we measured GPX, which is known
20 antioxidant, and we measured it in cells -- three
21 normal, and three ovarian cancer cells exposed to
22 various doses -- 5, 20 and 100 micrograms per ml of
23 Johnson & Johnson Baby Powder for 72 hours.

24 Q. Doctor, during your prior depositions questions
25 you were asked about the data in this spreadsheet and

1 specifically the second average listed in the
2 spreadsheet that has a value of 2.47.

3 MR. LAPINSKI: Your Honor, it is in the upper
4 right-hand side corner.

5 Q. Doctor, is the 2.47 calculation correct?

6 A. Yes, yes.

7 Q. Could you explain why it is correct?

8 A. Because it is taking the average of the three
9 values that are in the column where it says PG,
10 picogram.

11 THE COURT: This is on page 49?

12 THE WITNESS: Yes.

13 MR. LAPINSKI: Cory, could you go back to the
14 full screen shot. It is in the upper right-hand
15 corner. It is not highlighted in the lab notebook.
16 We're highlighting it for purposes here.

17 Q. Doctor, I want to take a step back now that
18 Judge Wolfson has page 49 in front of her.

19 During your deposition you were asked
20 questions about the values in the spreadsheet, and you
21 were specifically asked a question about the 2.47
22 average that's in the upper right-hand corner of the
23 spreadsheet. Is that calculation correct?

24 A. Yes.

25 Q. Would you please explain to the Court why that

1 calculation is correct?

2 A. Your Honor, this is the average of the three
3 numbers highlighted in the column under picogram
4 excluding the outlier. It is the average of 2.5 and
5 2.44, excluding 2.21 as an outlier.

6 We have formulas in all of these columns, and
7 the average -- all the averages are not the normalized
8 value. The averages is for the column that is
9 picogram per microliter RNA.

10 Q. Doctor, you used the term "outlier." What is an
11 outlier?

12 A. An outlier is statistically a different number
13 than the other two. That's what an outlier is.

14 Q. Dr. Saed, at the time of your depositions you
15 were unable to testify as to the accuracy of that
16 calculation. For what reason were you unable to
17 testify as to the accuracy?

18 A. Your Honor, we have over 5,000 data points in
19 the calculation, over a dozen formulas; and when I was
20 asked during my deposition, I could not recall. When
21 I went to the lab, I checked the formulas and
22 everything is correct.

23 Q. Doctor, the formulas that are in this
24 spreadsheet, are those formulas calculated manually?

25 A. No.

1 Q. How are they calculated?

2 A. Electronically.

3 Q. If we could go to page 61 of the laboratory
4 notebook.

5 Doctor, what does the data on page 61 of the
6 laboratory notebook represent?

7 A. This data here represents ELISA assay measuring
8 catalase activity in cells treated with Johnson &
9 Johnson Baby Powder for increasing dosage for
10 72 hours.

11 Q. Doctor, during your deposition you were asked
12 questions about the data in this spreadsheet as well,
13 and specifically you were asked about the 11.07 value
14 in the upper right-hand side corner of this
15 spreadsheet. Is the 11.07 calculation correct?

16 A. Yes.

17 Q. Could you please explain why that calculation is
18 correct?

19 A. It is the same way. It is the average of the
20 three numbers -- 9.98, 11.63, 10.50, eliminating the
21 outlier, which is, in this case, 9.98. I don't
22 eliminate the outliers manually. The outliers are
23 eliminated by a formula set up in the computer.

24 THE COURT: Why would that be an outlier as
25 opposed to the 11.63? How did you make that

1 determination? Because that's also more than one from
2 the 10.50. How did you make that determination?

3 MR. LAPINSKI: Cory, do you have the ability
4 to bring up the full page?

5 A. Your Honor, this is based on several formulas in
6 the vertical column not just one factor. There are a
7 lot of corrections to get into that average, and this
8 is set electronically by the formula.

9 Q. Doctor, in response to Judge Wolfson's question,
10 you referred to the fact that the 9.98 -- strike that.

11 Doctor, could you explain again to the Court
12 why the 9.98 would not just by default -- I'm sorry --
13 why the number other than the 9.98 would be the
14 outlier?

15 A. Your Honor, as I said, these formulas are all
16 electronically computed, and they are put in based on
17 a certain calculation. If you look at the vertical
18 column, you will see all these are corrections for
19 certain blanks and standards to compute that formula.
20 This is what the formula ended up doing.

21 Q. Doctor, when you used the word "correction," can
22 you explain to the Court what you mean by the word
23 "correction"?

24 A. Correction controlling for the blank,
25 controlling, for the changing in the assay.

1 Q. The formulas that make up these Excel
2 spreadsheets, are these formulas, standard formulas
3 for the testing you are doing?

4 A. Yes.

5 Q. And are these formulas you worked on in the past
6 and tested in the past?

7 A. Yes.

8 Q. Others in the industry doing the work you've
9 done, are they utilizing the same formulas you used
10 here?

11 MR. WILLIAMS: Objection. No foundation.

12 THE COURT: I would like more questions.

13

14

15 BY MR. LAPINSKI:

16 Q. Doctor, based upon your experience, do others in
17 the field work with the same type of formulas you are
18 using here?

19 A. Yes.

20 MR. LAPINSKI: Your Honor, do you have any
21 other questions in regard to the spreadsheet or how
22 calculations are determined?

23 THE COURT: Not for now.

24 Q. Dr. Saed, at the time of your deposition, again,
25 you were unable to testify as to the accuracy of the

1 numbers. What was the reason for that?

2 A. Your Honor, the same reason; there are too many
3 data points. There are over 5,000 data points, a lot
4 of formulas. I cannot recall the exact formula at
5 this time when they asked me about it.

6 THE COURT: By looking at these documents, the
7 spreadsheet, can you tell what the formula is that was
8 used?

9 THE WITNESS: From looking at the spreadsheet
10 itself, no. I have to look at the Excel sheet and in
11 the column, it says the formula.

12

13 BY MR. LAPINSKI:

14 Q. Doctor, the formulas that you are referring to,
15 where are the formulas derived from?

16 A. In this case, this is ELISA, so it comes from
17 the manufacturer, the kits. This is taking into
18 account extinction coefficient, the slope of the
19 standard curve. There are many formulas involved
20 here.

21 MR. LAPINSKI: If we could please go to page
22 104 of the laboratory notebook.

23 Your Honor, we're actually going to be looking
24 at page 103 and 104.

25 Q. Doctor, what does the data on page 104 of the

1 laboratory notebook represent?

2 A. It represents a single nucleotide polymorphism
3 in different markers that we studied. In this
4 specific one, it looks like catalase, which is a
5 powerful antioxidant enzyme.

6 Q. One of the defendants' experts, Dr. Boyd, has
7 stated that for the two rows of the Excel spreadsheet
8 that are marked TOV 112-T alleles 1 and 2 should equal
9 1.0.

10 What is your opinion on that?

11 A. If you look at the upper -- here this is the
12 frequency -- they add up --

13 Q. I'm going to interrupt you for a second.

14 Doctor, you are referring to the catalase, and
15 that's on page 103 of your lab notebook. Correct?

16 A. Correct.

17 Q. Continue.

18 A. They add up to 100 percent, 1.0.

19 MR. LAPINSKI: Your Honor, for your reference,
20 that's the upper left-hand corner, the highlighted
21 line that says SNP assay CAT.

22 Q. Those add up to 100 percent?

23 A. Yes.

24 If you go down to the other sheet, the other
25 sheet here representing CHI square, after running the

1 statistical analysis of the data, it is represented
2 here.

3 Q. Doctor, would you expect the lines in the
4 spreadsheet on page 104 to add up to 1.0?

5 A. No.

6 Q. Doctor, are you aware of any data from your
7 Johnson's Baby Powder research that's incorrect?

8 A. No.

9 Q. How can you be sure of that?

10 A. All our data is electronically calculated; and
11 to keep the record in the lab, we print them out from
12 the computer and we stick them in the notebook.

13 MR. LAPINSKI: Your Honor, if I can approach
14 the bench, I want to take one of the laboratory
15 notebooks from you.

16 THE COURT: One or two?

17 MR. LAPINSKI: It's the one that's not labeled
18 "Temple." It says "Nicole" on the binding of it.

19 Q. Dr. Saed, the defendants have argued that there
20 have been pages removed from your laboratory
21 notebooks, and, in particular, the defendants have
22 made the argument that approximately 10 pages have
23 been removed including pages 52, 74, 108 through 113
24 and 120.

25 What I would like to do is put up on the ELMO

1 page 52 of your laboratory notebook. Is page 52 of
2 your laboratory notebook missing?

3 A. No.

4 Q. What's reflected on page 52 of your laboratory
5 notebook?

6 A. It is a blank page.

7 Q. Why would there be blank pages in your
8 laboratory notebook, Doctor?

9 A. Because this is the end of the section to start
10 a new section.

11 Q. What's the significance of each section in
12 general, if you remember referencing a second? Why
13 does your notebook have different sections?

14 A. Before we start the experiment, we run different
15 experiments at the same time or similar time. We
16 predivide before we start the experiment. We divide
17 the lab notebooks into sections and label them.

18 If you look at the lab notebook, your Honor,
19 you will see these stickers that says ELISA. This is
20 the section where we do ELISA and we write all the
21 results in it.

22 The next section is statistics. This other
23 section is genetic mutations. We do this before we do
24 anything. We just estimate how many pages we need and
25 divide the lab notebook into sections; and when the

1 data comes in, we put them in the corresponding
2 sections.

3 THE COURT: Who put the little stickies on
4 with those words, like ELISA that I see there?

5 THE WITNESS: My research assistant.

6 THE COURT: When is that done?

7 THE WITNESS: When we started to do the
8 experiment.

9 THE COURT: Right at the outset?

10 THE WITNESS: Yes, before we fill in any data.

11

12

13 BY MR. LAPINSKI:

14 Q. Dr. Saed, I'm next going to show you page 74 of
15 your laboratory notebook. Is page 74 of your
16 laboratory notebook missing?

17 A. No.

18 Q. What's on page 74 of your laboratory notebook?

19 A. Same. It is a blank page.

20 Q. Doctor, we're going to look at pages 108 through
21 113 of your laboratory notebook. Are pages 108
22 through 113 of your laboratory notebook missing?

23 A. No.

24 Q. What's on those pages, Doctor?

25 A. The blank pages.

1 Q. How about page 120, Doctor? You taped in some
2 additional data. Correct?

3 A. No. This is already there.

4 Q. Is page 120 missing, Doctor?

5 A. No.

6 MR. LAPINSKI: Your Honor, if I could approach
7 the bench, I'm going to give you the laboratory
8 notebook back.

9 THE COURT: Thank you.

10 Q. Doctor, I'm going to have the Court turn to page
11 24 of the laboratory notebook. Doctor, after page 24
12 in the laboratory notebook, there are two pages that
13 have been removed. Correct?

14 A. Correct.

15 Q. Can you please explain to me your understanding
16 as to why those pages from the laboratory notebook
17 were removed?

18 MR. WILLIAMS: Which one are we using, Exhibit
19 H? I would ask counsel to identify by the exhibits.
20 We're having trouble following, trying to find the
21 page.

22 MR. LAPINSKI: By the Bates numbers.

23 MR. WILLIAMS: Or the exhibit number.

24 MR. LAPINSKI: Exhibit H.

25 MR. WILLIAMS: Can I ask the page number.

1 MR. LAPINSKI: 24.

2 MR. WILLIAMS: In the copy we have, your
3 Honor, some of the page numbers are legible but some
4 are not at the bottom of the page. So we would ask
5 that counsel describe the Bates number rather than the
6 handwritten page number because those are not legible.

7 THE COURT: Okay.

8

9

10 BY MR. LAPINSKI:

11 Q. Dr. Saed up on the ELMO we have page 24 of your
12 laboratory notebook, which was in Exhibit G, and the
13 2 pages following page 24 have been removed. Correct?

14 A. Correct.

15 Q. Can you please explain your understanding as to
16 why those pages have been removed?

17 A. Your Honor, we have a new hire research
18 assistant from China, and she was not familiar with
19 the practice, normal practice of lab notebooks. She
20 wanted to keep everything related to talcum powder in
21 one notebook. So she started a different project in
22 those two pages. So she decided to take them out. I
23 instructed her not to do it. This is very bad
24 laboratory conduct.

25 Q. Dr. Saed, I'm going to ask you to make sure you

1 speak up.

2 Dr. Saed, is it normal lab practice to remove
3 pages from your notebooks?

4 A. Absolutely not.

5 Q. Doctor, do the missing pages have any
6 substantive effect on the work that you have done?

7 A. No.

8 Q. Why not?

9 A. They are completely for a different project.
10 Typically, in our lab, your Honor, we have small
11 projects and we have one notebook we used for
12 different projects because we divide them into
13 sections. In this one we decided to keep everything
14 related to talcum powder in one place.

15 Q. To the extent the pages of the notebook had been
16 removed and those pages had contained a computerized
17 data you put into the notebook. Would the removal of
18 those pages have any substantive effect on the work
19 you did?

20 A. No.

21 Q. Why not?

22 A. Because they don't have any data, and they are
23 for a different project.

24 Q. Where is the data for your research maintained?

25 A. They are all maintained in the computer

1 electronically.

2 Q. Doctor, to the extent the pages that have been
3 removed contain handwritten notes on the methodologies
4 that you employed in your research, would that have
5 any substantive effect on the outcome of your results?

6 A. Not at all.

7 Q. Why is that?

8 A. Because all the data is in the computer, and
9 they are glued into the lab notebook; and, also, these
10 methodologies, we have done several, many, many, many
11 times, and we are familiar with the methodology. So
12 the lab notebook have no -- we have the data that
13 comes from the computer straight to the lab notebook.
14 No one has any influence in the lab nor in the
15 computerized data.

16 Q. Dr. Saed, are there certain sections within the
17 notebook where white-out has been used?

18 A. Yes.

19 Q. Can you please explain your understanding as to
20 why certain pages of your notebook have white-out on
21 them?

22 A. Yes.

23 MR. WILLIAMS: May we ask again what notebook
24 is it, G or H?

25 MR. LAPINSKI: We are going to end up

1 referencing H; but in general, there is white-out in
2 parts of section G and white-out in parts of section
3 H.

4 MR. WILLIAMS: As counsel is going through
5 those, will he identify whether it is G or H.

6

7

8 BY MR. LAPINSKI:

9 Q. Doctor, in Exhibits G and H there are pages that
10 have white-out. Correct?

11 A. Yes. Your Honor, this is from the new hired
12 lady.

13 THE COURT: Speak up.

14 THE WITNESS: The new research assistant that
15 we hired has this habit of whitening out spelling
16 mistakes, grammar, because she's embarrassed if we see
17 it. If you look at the white-out, you can see through
18 them. All the white-out is in the writing section,
19 the methodology part that we already have established
20 in the lab with printouts. She has no white-out in
21 the data. All the data is in the computer. She has
22 nothing to do with that. I instructed her this is a
23 bad practice. You cannot white-out stuff. You have
24 to cross it and write over it, and she never did it
25 after that. But all the white-out is in the writing,

1 the methodology part, not in the data part. So it
2 will not have any substantial effect on the data.

3 Q. Dr. Saed, who has ultimate responsibility for
4 the content of these laboratory notebooks?

5 A. I do.

6 Q. Dr. Saed, did anyone in your lab use white-out
7 to change information after your experiments had been
8 completed?

9 A. No.

10 Q. Did you or anyone in your lab use white-out to
11 change the results in your research?

12 MR. WILLIAMS: Objection. Lacks foundation.

13

14 BY MR. LAPINSKI:

15 Q. Doctor, are you aware of whether anyone in your
16 lab used white-out to change any results of your
17 research?

18 A. Your Honor, I have lab notebooks dated 20 years
19 ago to now, and I can show there is not one single
20 incident we have white-out in any of those lab
21 notebooks. This is just because of this new hire.
22 She wasn't familiar with the practice and she started
23 whiting out; and the white-out you could see through
24 it, and no white-out is in the data. This is just in
25 the methodology. We don't even need to put in the lab

1 notebook.

2 Q. Dr. Saed, does the white-out have any
3 substantive effect on the results of your research?

4 A. Absolutely not.

5 Q. Why not?

6 A. Because all of the data are electronically kept
7 with formulas.

8 THE COURT: For instance, when you were doing
9 your results 24, 48, and 72 hours, was that
10 electronically kept simultaneously while you were
11 doing the work?

12 THE WITNESS: Yes.

13 THE COURT: Because there are some indications
14 the 48 hours was changed to 72 at some point?

15 THE WITNESS: Not in the lab notebook. There
16 was an error in the actual manuscript. Your Honor,
17 the manuscript -- we have trainees like clinical
18 residents and fellows, and we let them participate in
19 writing, practicing writing a paper and discussing
20 data and doing graphs. This is part of our mentorship
21 practice.

22 MR. WILLIAMS: I can't hear him.

23 A. This is part of our mentorship practice. If
24 there is an error that's in the manuscript when it
25 gets back to me at the last stage, I will make sure I

1 check everything and I correct everything according to
2 what's written in the laboratory notebook.

3 THE COURT: You would consider that
4 significant, the timing, in the experiments?

5 THE WITNESS: Yes.

6 Q. Dr. Saed, is the timing related to the
7 experiment maintained in the computerized data that
8 you previously referred to?

9 A. The timing of each experiment is logged in in
10 the lab notebook.

11 Q. And the data that results from the different
12 experiments that you run at different time intervals,
13 where is that data stored?

14 A. In the computer.

15 Q. Is it possible to change the timing that you
16 referred to in your research by using white-out?

17 A. No.

18 THE COURT: I just want to clarify this. I
19 asked him the question about timing. He said it is in
20 the computer. You just asked him -- you said is the
21 timing related to the experiment; his answer was the
22 timing of the experiment is logged into the lab
23 notebook. It is not quite consistent to me. I want
24 to understand before we go on.

25 Q. Doctor, do you understand the question Judge

1 Wolfson is asking?

2 THE COURT: Clarify where the timing is
3 entered and when it is entered from each of those
4 sources, computer versus lab notebook.

5 THE WITNESS: I will.

6 In the lab notebook, we write "experiment" as
7 you see there. We write "cells," what cells we treat;
8 we list them. What material we use, what type of
9 powder we use, and how long we are going to treat.
10 Then we run the assay. And in the computer there is a
11 date -- if you look at the electronic copies you see
12 the dates. There is a date in the electronic copy
13 where we run the assay. And then all the data from
14 the assay is linked to the computer. The computer is
15 exported to the spreadsheet that has all the
16 formulas, all the calculations --

17 THE COURT: Who inputs into the computer?

18 THE WITNESS: We remove them from the
19 computer, from the computer that's linked to the
20 machine. We take them in a flash drive. We put them
21 in the main computer of the lab, and we transfer,
22 export the data to the spreadsheet.

23 THE COURT: I'm asking how it appears on the
24 computer. I just want to understand what your
25 testimony is.

1 Is what you are saying, that this assay --
2 what's actually being done on there is somehow on the
3 machine also reflecting the timing, and that is on a
4 flash drive that gets put into the computer or no?

5 THE WITNESS: No.

6 THE COURT: So I'm not understanding your
7 testimony.

8 Q. Dr. Saed, can you clarify in regard to the
9 different treatment times, 24, 48 and 72 hours, how
10 those treatment times are recorded?

11 THE COURT: How they are recorded into the
12 computer. He's already said they go into the lab
13 notebook, and I think you answered those are entered
14 into the lab notebook at the time that the experiment
15 is occurring, not after the fact. Is that correct?

16 THE WITNESS: We enter them into the lab
17 notebook.

18 THE COURT: When?

19 THE WITNESS: When we start the experiment.
20 We write the conditions, the cells, how long they are
21 going to be exposed for, the time, what are the doses
22 we are going to use, and we write this down. We go
23 and do the experiment. We print the printout of the
24 experiment from the computer, from the spreadsheet; we
25 print it out and stick it next to those sections where

1 we describe it.

2 Am I clear?

3 THE COURT: I don't think I'm going to get it
4 any clearer. I guess you'll move on.

5 Q. Doctor, in section H of the laboratory notebook
6 you previously testified that this section of the
7 laboratory notebook pertains to your testing on
8 Johnson's Baby Powder. Correct?

9 A. Yes.

10 Q. If you would, Doctor, can you please tell the
11 Court how you know that it was Johnson's Baby Powder
12 that was used in this third section of testing?

13 A. The first page in the introduction where we
14 started.

15 Q. That's the first page in Exhibit H. Correct?

16 A. In the lab notebook, yes. It shows the picture
17 of Johnson & Johnson Baby Powder. It shows the cells
18 that we used. It shows everything in the beginning.

19 THE WITNESS: If I may, your Honor, to follow
20 up with how we record the time, if you open to the
21 same page as this one here --

22 THE COURT: I think you are referring in this
23 lab notebook, which page?

24 BY MR. LAPINSKI:

25 Q. I'm assuming, Doctor, you are referring to the

1 first page in Exhibit H?

2 A. Yes.

3 MR. LAPINSKI: Your Honor, I believe in the
4 laboratory notebook that would be page 28, I believe.
5 In that notebook, your Honor --

6 THE COURT: Somewhere down the line when I
7 have to look at this record I would have no idea what
8 pages you are referring to if you are giving me the
9 lab notebook versus Exhibit H. Maybe the best thing,
10 let's refer to the exhibits.

11 MR. LAPINSKI: In your binder, Exhibit H in
12 your binder, the first page, Exhibit H in your binder.

13 THE COURT: It is a picture of Johnson's --

14 Q. Dr. Saed, I asked you the question whether or
15 not Johnson's Baby Powder had been used in the
16 experiments that you had conducted, and you said yes.
17 Can you explain to me how you can be sure it was
18 Johnson's Baby Powder that was used?

19 A. This section of the lab notebook, all the work
20 is done with Johnson & Johnson Baby Powder, and
21 usually we describe the cell lines that we are going
22 to use and where do they come from, and we put a
23 picture and lot number of the Johnson & Johnson Baby
24 Powder that we used.

25 MR. LAPINSKI: Judge Wolfson, do you have any

1 questions in regard to sections in the lab notebook
2 that might have had white-out?

3 THE COURT: Without going to specific pages.
4 I have his general testimony of what occurred saying
5 it was due to errors by a new lab assistant who didn't
6 understand how to do things, and his view was none of
7 it was substantive. I'll wait for cross-examination
8 on particular ones. I'll wait for that.

9 Q. Dr. Saed, I would like to be able to discuss
10 with you the methodologies you employed while
11 conducting your research.

12 In your opinion, are the methodologies you
13 used in conducting your research generally accepted?

14 A. Yes.

15 Q. Can you please explain that?

16 A. As I said, in my research I used realtime PCR,
17 ELISA, MTT proliferation assay, apoptosis assay, cell
18 death assay, and all the assays, your Honor, I just
19 listed, these are very well established assays
20 methodologies, well used by the research community in
21 hundreds, maybe thousands of papers.

22 Q. Doctor, did you publish on the same methods you
23 used in your Johnson & Johnson Baby Powder recently?

24 A. Yes.

25 Q. The methods you used in the research of Johnson

1 & Johnson Baby Powder, how many times do you think you
2 have published on those methods?

3 A. I'll say over a hundred-plus publications.

4 Q. Are there others in the scientific community
5 that published using those same methods?

6 A. Yes.

7 Q. How many times do you think others have
8 published on research using the methods you used in
9 your Johnson's Baby Powder research?

10 A. This is a -- these are common methodologies.
11 Everybody in cell biology and biochemistry uses them,
12 everybody.

13 Q. Are you aware of other researchers who published
14 using methods similar to the methods you used where
15 the publications dealt with research on talcum powder?

16 A. Yes.

17 Q. Doctor, I would like to discuss several
18 different aspects of your research design and methods.

19 First, Doctor, have you done testing on
20 particles applied to cell cultures in the past?

21 A. Yes.

22 Q. Can you give me some examples of testing done on
23 particles involving cell cultures?

24 A. I was hired by Genzyme to test their product
25 Seprafilm.

1 They asked me to test the particulate, their
2 product, they used to prevent or minimize
3 postoperative adhesions. Those adhesions happen in
4 women after caesarean sections, and I tested the
5 product, and we used the exact same methodology that
6 we used to test Johnson & Johnson Baby Powder, and I
7 found out that their product does not induce any
8 biological activity, and it works by -- simply as a
9 film barrier between juxtaposed surfaces.

10 Q. Was it testing of the Seprafilm product you
11 referred to? During that testing did you employ the
12 same methods you employed in testing Johnson's Baby
13 Powder?

14 A. Yes.

15 Q. Was your testing published?

16 A. Yes.

17 MR. WILLIAMS: Objection to the extent this is
18 not contained in the doctor's report, at least as far
19 as I know. The testimony regarding the other company
20 and the other products.

21 MR. LAPINSKI: The publications Dr. Saed is
22 referring to are contained in the CV attached to his
23 expert report.

24 THE COURT: The question is, did he anywhere
25 indicate he used this method before, and he was

1 questioned about it at his deposition, and I take it
2 that was not part of the testimony.

3 MR. LAPINSKI: The testimony at -- the
4 testimony at his deposition was that he couldn't
5 recall specific instances. He did recall one instance
6 during his deposition that he had tested on particles
7 and cell cultures, but at the time of his deposition
8 he wasn't able to recall others.

9 Again, your Honor, the publications -- the
10 testing and research we are referring to right now are
11 publications contained in his CV and disclosed as work
12 he had done.

13 MR. WILLIAMS: As I understand, what counsel
14 is saying, it is not indicated in Dr. Saed's report
15 that either the company or the material, the product
16 was tested. He was asked about it at his deposition
17 and could not recall. He could not list any. So we
18 will ask to strike testimony concerning some prior
19 testing for another company with another product to
20 reach a particular result to the extent it is not in
21 the report.

22 THE COURT: He certainly didn't have an
23 opportunity to explore it because he didn't identify
24 it before.

25 Let's move on, please.

1 BY MR. LAPINSKI:

2 Q. Dr. Saed, the test methods that you employed in
3 testing Johnson's Baby Powder, have you used those
4 similar test methods to test particles in cell
5 cultures in the past?

6 A. Yes.

7 Q. That testing that you have done, have you been
8 published on that testing?

9 A. Yes.

10 Q. How many different times have you been published
11 on that form of testing?

12 A. Over maybe 100 manuscripts.

13 Q. Dr. Saed, is the testing of particles in cell
14 cultures that you've done in the past published?

15 A. Yes.

16 Q. Dr. Saed, are you aware of others who have
17 published on the testing of particles in cell cultures
18 using the same methods you employed in your Johnson's
19 Baby Powder research?

20 A. Yes.

21 Q. Dr. Saed, are the methods used by you in your
22 Johnson's Baby Powder research to test particles in
23 cell cultures generally accepted?

24 A. Yes.

25 Q. Dr. Saed, I want to talk to you about your use

1 of controls during your testing. Could you explain to
2 the Court what a control is?

3 A. A control is a vehicle that we use in order to
4 determine if the effect of the agent that we are
5 treating is due to the agent and not due to another
6 artifact.

7 Q. In basic terms, can you give us an example of a
8 control?

9 A. What I could think of right now, the best
10 example would be the placebo control when we are
11 testing the effect of drugs.

12 Q. Doctor, did you use the control in the research
13 you constructed?

14 A. I did.

15 Q. What was the control you used?

16 A. Talcum powder dissolved in DMSO and DMSO alone.

17 Q. For what reason did you opt to use DMSO?

18 A. DMSO is an organic solvent commonly used in
19 research studies, and I used it in the past and other
20 people have used it.

21 Q. Have you used it in the past in research that
22 has been published?

23 A. Yes.

24 Q. Are you aware of others who used DMSO for
25 research that has also been published?

1 A. Yes, several, many.

2 Q. Would you consider DMSO to be generally accepted
3 by the scientific community?

4 A. Yes.

5 Q. Doctor, I want to talk to you about the doses
6 you chose to use during the testing of your Johnson's
7 Baby Powder. What were the doses of talc that you
8 used as part of your research?

9 A. I used zero, five, 20 and 100-micrograms per
10 milliliter.

11 Q. How did you come to the decision to use those
12 doses?

13 A. Those doses are published, similar to these
14 doses are published in the literature that talk about
15 testing talcum powder and determining whether the
16 powder has a biological effect in cells.

17 Q. Did those published papers play a role in your
18 decision as to the doses you used in testing Johnson's
19 Baby Powder?

20 A. It helped me to make sure I am in the right
21 range of doses and not using excessive dose that may
22 kill the cell.

23 Q. Dr. Saed, are you familiar with the scientific
24 concept of testing in triplicate?

25 A. Yes.

1 Q. Can you explain that concept to the Court?

2 A. Triplicate, your Honor, in cell culture as we do
3 it. We do it in one way to take one cell, one plate,
4 and divide it into three different plates, and that's
5 considered the triplicate.

6 The other way which I like to do in cases like
7 this is to, instead of getting one cell line, divide
8 it into three, I got six different cell lines and I
9 used them.

10 So if you find the effect, the same effect
11 that we found with talcum powder in six different cell
12 lines, it will be way more powerful than finding this
13 effect in one cell line split into three.

14 THE COURT: That's not testing in triplicate?

15 THE WITNESS: It is. It is testing more than
16 triplicate. We tested six different cell lines.

17 THE COURT: The way you explained the first
18 one, that's not what you are doing here. What's
19 supports your basis for doing it in this way?

20 THE WITNESS: When I did have it here, I've
21 decided to do it testing it in six different cell
22 lines rather than one cell line doing it three times.

23 THE COURT: Then you are not repeating it.
24 You are doing different cell lines and not repeating
25 it three times with those cell lines?

1 THE WITNESS: The experiments are all done in
2 triplicate, your Honor. The effect that you see in
3 three normal, different normal is more powerful than
4 the same effect that you see in one normal three
5 times. I published both ways.

6 Q. Doctor, you've conducted experiments using both
7 designs that you discussed here. Correct?

8 A. Yes.

9 Q. And you published using designs of triplicate
10 that you used here?

11 A. Yes.

12 Q. Are you aware of others that have been published
13 using the second form of triplicate that you used here
14 with Johnson's Baby Powder that have been published?

15 A. Yes.

16 Q. Doctor, if someone wanted to, how would they go
17 about reproducing the research that you did?

18 A. They can read the manuscript, look at the
19 methodology part and replicate it.

20 Q. Are the testing methods that you used in testing
21 Johnson's Baby Powder established testing methods?

22 A. Yes.

23 Q. If someone were to take the manuscript that you
24 used, referred to, and applied those general testing
25 methods, they would be able to reproduce the research

1 that you did?

2 A. Yes.

3 Q. I want to discuss with you the markers that you
4 used in analyzing Johnson's Baby Powder. What were
5 the five different markers that you looked at?

6 A. We looked at redox balance. We looked at CA-125
7 levels. We looked at cell proliferation. We looked
8 at apoptosis. We looked at gene mutations in key
9 enzymes that regulates the redox balance.

10 Q. Why did you choose these particular markers?

11 A. So these markers will provide the overall
12 picture of cells going into the transformation mode,
13 and also these are all well known experiments to us.
14 We have previously published with them. They are
15 within the expertise of my lab. We have done over 50
16 publications with this different testing in ovarian
17 cancer specifically.

18 Q. Are you aware of others outside of your lab that
19 used these markers and tested for ovarian cancer using
20 these markers?

21 A. Yes.

22 Q. Are you aware of others who published using
23 these markers?

24 A. Yes.

25 Q. Would you consider the use of these markers to

1 be generally accepted?

2 A. Yes.

3 Q. Doctor, I would like you to describe the
4 specific experiments you chose to use in order to test
5 each marker.

6 A. If you look, your Honor, at the screen, we
7 measured several processes. We measured the redox
8 balance. For this we used realtime PCR, which is a
9 well-establish technique by the research community and
10 ELISA, which is a well-established technique. We used
11 CA-125. We used ELISA to measure that, and that's a
12 very, very common technique. We used the MTT cell
13 proliferation assay, which is a very commonly used
14 assay to measure cell divisions, and we used Caspase 3
15 activity, which is an indicator of cells going through
16 apoptosis, which is -- and we used Taqman, again, type
17 which is a very common assay looking at certain,
18 again, mutations and enzymes on proteins.

19 Q. Doctor, were there other experiments you could
20 have chosen in order to test each marker?

21 A. Yes.

22 Q. Is it necessary to run every available
23 experiment for you to make determinations regarding
24 the effect of talcum powder on these various markers?

25 A. No.

1 Q. Why did you choose these particular experiments?

2 A. Your Honor, these are very well established
3 methodologies in my lab, and we feel very confident
4 with these methodologies.

5 Q. Doctor, in addition to them being very well
6 established in your lab, are you aware of others who
7 have used these experiments?

8 A. Yes.

9 Q. Are you aware of others who have been published
10 using these experiments?

11 A. Yes.

12 Q. Would you consider these experiments to be
13 generally accepted?

14 A. Yes.

15 Q. Doctor, could you please explain to the Court
16 what "altered redox balance" means?

17 A. Redox balance, your Honor, you have two groups
18 of enzymes that regulate the overall oxidant balance:
19 The enzymes that cause oxidation and the enzymes that
20 remove oxidation, and the balance between the two is
21 redox balance. This balance is very critical
22 especially for ovarian cancer development. We have
23 published several papers showing this is a hallmark of
24 ovarian cancer pathogenesis.

25 Q. Dr. Saed, what did your research find in regard

1 to redox balance?

2 A. We found that ovarian cancer cells have enhanced
3 as we characterized previously, enhanced oxidative
4 stress balance. They have enhanced prooxidant state.
5 What my research showed here, that if you treat normal
6 cells with Johnson & Johnson Baby Powder, you get a
7 huge increase in a dose response manner in oxidants.
8 This side here is oxidants. This is a huge increase
9 compared to control, and this accompanied with a
10 decrease in antioxidants.

11 We confirmed this finding, your Honor. We
12 didn't do just PCR one assay, one RNA. We confirmed
13 the data at the RNA level and the protein level and
14 activity level in both tests.

15 Q. Doctor, could you please explain to the Court
16 what apoptosis is?

17 A. Apoptosis is a program cell death. It is a
18 natural process that occurs in the body that
19 eliminates bad cells that we develop every single
20 minute in our body.

21 Q. Can you explain to the Court what proliferation
22 is?

23 A. Proliferation is cell division, but in cancer
24 cell division which is uncontrolled. So the cells
25 keep dividing without control mechanism.

1 Q. What did your testing of Johnson's Baby Powder
2 find as it relates to apoptosis and proliferation?

3 A. We found an increase in proliferation in
4 uncontrolled cell division and decrease in apoptosis.
5 These two processes, your Honor, are strong indicators
6 of cells on their way to transformation.

7 Q. Doctor, what is gene mutation?

8 A. It is a switch in the nuclear type in the DNA.

9 Q. What is the significance of gene mutation as it
10 relates to ovarian cancer?

11 A. Gene mutations occur in almost all cancers that
12 we know.

13 Q. What did you find out about gene mutation in
14 your research related to Johnson's Baby Powder?

15 A. Your Honor, we found that if you expose normal
16 surface epithelial cells from the ovary to talcum
17 powder 100 micrograms per mill for 72 hours, you get a
18 switch in the genome in the DNA sequence that
19 corresponds to these key enzymes that regulate the
20 redox balance, and that's very, very significant
21 because it alters -- now we can understand the
22 mechanism by how Johnson & Johnson Baby Powder
23 inducing these mutations that changes the activity of
24 these enzymes that are key players keeping the oxidant
25 redox balance.

1 Q. Doctor, is there a difference between gene
2 mutation and cell transformation?

3 A. Usually gene mutation is before transformation.
4 It is very early process. It happens every day, and
5 we have apoptosis in our bodies that eliminate mutated
6 cells or bad cells. But gene mutation is a very early
7 process and it is followed by transformation.

8 Q. In the research you conducted related to
9 Johnson's Baby Powder, did your experiments find cell
10 transformation?

11 A. No, I did not test for actual cell
12 transformation, but I tested for cell proliferation
13 and apoptosis which are accepted as strong indicators
14 of cells going transformation.

15 Q. Doctor, what is your opinion as it relates to
16 Johnson's Baby Powder and cell transformation?

17 A. I think the fact that Johnson & Johnson Baby
18 Powder was able to induce mutations in key oxidant
19 enzymes and antioxidant enzymes and altering their
20 activity and changing the overall redox balance in a
21 way that limits exactly what we have studied for
22 several years. Ovarian cancer profile is very
23 significant. It is an indication cells are going in
24 this direction.

25 Q. Doctor, that opinion that you are offering, is

1 that opinion based solely upon the research you did
2 related to Johnson's Baby Powder?

3 A. Yes, it is part of it, and the research we did
4 here and also in our 25 years experience, your Honor,
5 with oxidative stress and ovarian cancer.

6 Q. Dr. Saed, what is CA-125?

7 A. CA-125 is a marker of -- it is a cancer antigen
8 gene, a protein that is increased in cancer cells.

9 Q. Why did you test for CA-125?

10 A. It is considered a marker for ovarian cancer for
11 a doctor when they monitor patient response to
12 therapy.

13 Q. What did your testing of CA-125 show?

14 A. It shows that if you treat cells with
15 100 micrograms per ml for 72 hours, you will see a
16 significant increase in CA-125, indication of
17 inflammation.

18 Q. Doctor, what cell lines did you use in the
19 experiments that you ran?

20 A. Your Honor, we used three different ovarian
21 cancer cells and we used one normal epithelial
22 Fallopian tube cells and one normal primary ovarian
23 epithelial cells and as a control for nonepithelial
24 cell origin.

25 Q. Doctor, how was it that you decided to use these

1 cell lines?

2 A. These cell lines we have experience, we
3 published with them several times. They are well
4 known to us in our lab, and we know their oxidative
5 stress profile.

6 Q. Are you aware of others who have published using
7 these cell lines?

8 A. Yes.

9 Q. Doctor, could you have used just a single cell
10 line in your research?

11 A. Yes.

12 Q. Why did you choose not to use a single cell
13 line?

14 A. It is more powerful to show the effect in
15 various cells than just one cell line.

16 Q. Dr. Saed, I would like you to turn in your
17 binder to Exhibit SAED OPP Exhibit F.

18 MR. LAPINSKI: That's toward the back, your
19 Honor.

20 Q. Dr. Saed, what is it that we are looking at that
21 has been marked as SAED OPP Exhibit F?

22 A. We are looking at hypothesis-driven proposal --
23 budget.

24 Q. Dr. Saed, who prepared this budget?

25 A. I did.

1 Q. Why did you prepare this budget?

2 A. Your Honor, before we start any project in our
3 lab, because we have many trainees and many research
4 assistants, we outline the project in a hypothesis-
5 driven research, because most of our projects end up
6 submitting to agencies for funding, and also for the
7 people in the lab to know the outline of the project,
8 and for us to know how much it will cost to run the
9 project.

10 Q. Doctor, you used the phrase "hypothesis-driven
11 budget." Can you please explain what you mean by
12 that?

13 A. Hypothesis-driven research, I've been doing this
14 for the last 25 years or more. When you write a grant
15 to agencies like federal agencies, for example, like
16 NIH or NCI, they have a format you should follow, and
17 I got the habit of following this format, which is the
18 hypothesis rationale -- what are your expected
19 results, what do you expect to get; if you don't get
20 what you expect to get, what is your alternative
21 approach, and what is your future direction.

22 I got into this habit of writing that all the
23 time.

24 Q. If we could, Doctor, what was the objective of
25 the research that you stated in your budget?

1 A. So here the objective is to determine whether
2 talc can induce mutations in key redox enzymes. These
3 mutations are responsible and they contribute to the
4 development of the oncogenic phenotype. It is
5 becoming cancerous.

6 Q. Doctor, could you please explain what you mean
7 by "oncogenic phenotype"?

8 A. Cell becoming cancer.

9 Q. At the time you prepared this budget, did you
10 think whether talc could induce mutations as you've
11 stated in your objective?

12 A. No.

13 Q. If we could go to the second page of this.

14 Doctor, this is Aim 1 on page 2 of your
15 proposal. Could you explain to the Court how Aim 1 is
16 structured in accordance with the hypothesis-driven
17 budget you were previously explaining?

18 A. In Aim 1 we wanted to determine whether exposing
19 cells to talc will change the overall oxidative stress
20 balance, and looking at key markers of oxidation and
21 key markers of anti-oxidation.

22 Q. Is that the hypothesis?

23 A. Yes.

24 Q. You also mentioned a rationale part of the
25 hypothesis-driven budget. Correct?

1 A. Yes.

2 Q. In the image you are looking at Aim 1, what part
3 of that would be the rationale that you are referring
4 to?

5 A. That we have seen these changes linked to
6 ovarian cancer in previously published work that we
7 have done and others did, and we are looking at the
8 specific markers that are key regulators of oxidative
9 stress and inflammation, and we expect -- this is just
10 as I mentioned, your Honor -- this is just a way we
11 write for granting agencies.

12 Q. Doctor, are you aware of others who prepared
13 grants that were submitted to agencies that employed
14 the same format you used in this budget?

15 A. Yes. Everybody has to use this format.

16 Q. Doctor, in addition to the hypothesis and
17 rationale sections, you also mentioned there is an
18 expectation that's part of the hypothesis-driven
19 budget. Correct?

20 A. Yes.

21 Q. Do you have an expectation section that's
22 demonstrated here in this aim?

23 A. Yes. Expectation doesn't mean this is what I
24 want to get. It means based on the results would show
25 positive, this is what we would get, and then we would

1 have to have a alternative approach if our approach
2 doesn't work.

3 Q. Is it standard practice when preparing this type
4 of hypothesis-driven budget and submitting a grant to
5 an agency to state what your expectations of your
6 research are?

7 A. Yes.

8 Q. In all three aims in your budget did you include
9 a hypothesis, a rationale, and an expectation?

10 A. Yes.

11 Q. I would like to go to Aim 3 that's contained in
12 your budget.

13 Doctor, in looking at Aim 3 that's contained
14 in your budget at the bottom in the expectations,
15 what's the expectation you have in Aim 3, Doctor?

16 A. We expected to see if you treat cells with
17 talcum powder, they will result in neoplastic
18 transformation over time. That's our expectation.

19 Q. Doctor, does that sentence note anything else in
20 regard to neoplastic transformation?

21 A. Yes, which is critical in establishing cause and
22 effect relationship.

23 Q. Did you run a neoplastic transformation assay in
24 your research?

25 A. No, I did not.

1 Q. Is a neoplastic transformation assay necessary
2 to support the opinions you are providing here?

3 A. No.

4 Q. Why is that?

5 A. Your Honor, as I mentioned, I have done cell
6 proliferation and apoptosis, and both are accepted as
7 strong indicators of cells going through the
8 transformation process.

9 Q. Doctor, the research that you did related to
10 Johnson's Baby Powder, has that been reviewed by
11 independent experts?

12 A. Yes.

13 Q. I would like to be able to walk through the
14 reviews that have been conducted by independent
15 experts if we could.

16 Doctor, if you look at the screen, what's the
17 first time the research that you conducted related to
18 talcum powder was reviewed by independent experts?

19 A. The first time is the abstract that we submitted
20 to the 65th annual meeting of the Society For
21 Reproductive Investigation. This work is looking at
22 the effect of exposing cells to talc and looking at
23 the oxidative stress profile of the cell.

24 Q. Doctor, what is your understanding as to the
25 number of experts that would review that abstract

1 prior to it being accepted for presentation?

2 A. Typically, they are reviewed by four to six
3 experts.

4 Q. When is the next time that your work was
5 reviewed by independent experts, Doctor?

6 A. We submitted to the same meeting another
7 abstract looking at the levels of CA-125 in response
8 to talcum treatment of cells. This is also reviewed
9 by four to six experts in the field.

10 MR. WILLIAMS: We object to the lack of
11 foundation for the abstracts as to how many experts
12 reviewed.

13

14 BY MR. LAPINSKI:

15 Q. Doctor, have you previously served as a reviewer
16 for the Society of Reproductive Investigation?

17 A. Yes, I did.

18 Q. In your experience as a reviewer for the Society
19 of Reproductive Investigation, how many experts will
20 commonly review abstracts submitted for presentation?

21 A. Four to six.

22 THE COURT: Is that what you are basing your
23 testimony on, your past experience?

24 THE WITNESS: Yes.

25 THE COURT: You don't know for a fact how many

1 reviewed your abstracts?

2 THE WITNESS: No.

3 MR. LAPINSKI: Your Honor, we can hand up an
4 exhibit which is a printout from the Society of
5 Reproductive Investigation that goes through the
6 guidelines required for the submission of an abstract
7 that supports there are four to six experts that do
8 review it. It was our intention to hand that up
9 assuming he was questioned on cross-examination. We
10 were going to hand that up on redirect --

11 THE COURT: I think it was part of your
12 papers. I thought I looked at it over the weekend.

13 MR. LAPINSKI: I believe it was an exhibit.

14 THE COURT: I saw them.

15 Q. Dr. Saed, your manuscript was also submitted for
16 consideration to Gynecologic Oncology. Correct?

17 A. Yes.

18 Q. Was your manuscript accepted for publication by
19 Gynecologic Oncology?

20 A. No.

21 Q. However, the submission was reviewed. Correct?

22 A. Correct.

23 Q. What's your understanding as to the number of
24 experts who reviewed the submission you made to
25 Gynecologic Oncology?

1 A. It is reviewed by two reviewers.

2 Q. Can you identify what's on the screen?

3 A. This is a letter from Gynecologic Oncology
4 stating they will not be able to accept my work at
5 this moment.

6 MR. LAPINSKI: For the record, the exhibit
7 that's now showing on the screen is in the binder and
8 it is PSC Saed OP Exhibit M.

9 Q. Dr. Saed, did you receive feedback from the
10 independent experts at Gynecologic Oncology with
11 regard to the manuscript that you had submitted?

12 A. Yes.

13 Q. I would like to first look at the feedback you
14 reviewed from Reviewer No. 1. What were the comments
15 that Reviewer No. 1 made in regard to the manuscript
16 that you submitted?

17 A. The first comment from Reviewer 1, it says that
18 "Overall, this is a well-written manuscript, and the
19 conclusions are supported by the results."

20 Q. What are other comments that Reviewer No. 1
21 made?

22 A. Reviewer No. 1 suggested to enhance the study by
23 utilizing mouse models.

24 Q. In your opinion do you need animal studies to
25 support the opinions you are providing here today?

1 A. No.

2 Q. If animal studies were done, would the animal
3 study corroborate the work that you have done?

4 A. Yes. I have to say, your Honor, cell culture is
5 the gold standard for testing mechanisms if you are
6 looking at the effect of an agent on cell functions.

7 Q. Dr. Saed, if we look at comment No. 3, and if
8 you could just read what comment No. 3 from Reviewer 1
9 was?

10 A. It says:

11 "Oxidative stress is a key mechanism to the
12 initialization and progression of ovarian cancer.
13 This is not supported by this investigation and should
14 be omitted."

15 Q. The quotation there, that's a quotation you had
16 in the manuscript that you submitted. Correct?

17 A. Yes.

18 Q. And Reviewer No. 1 here is stating the opinion
19 that it's not supported by your research?

20 A. Yes.

21 Q. Do you agree with that comment, Doctor?

22 A. No.

23 Q. Why don't you agree with that comment?

24 A. Because in the same journal I published a review
25 article, and this statement was the actual highlight

1 from that article, take-home message.

2 Q. Doctor, I would like to take a look at the
3 comments --

4 THE COURT: What is the review article?

5 MR. LAPINSKI: Excuse me, your Honor?

6 THE COURT: What is a review article?

7 THE WITNESS: A review article is usually
8 written by experts in the field for the journal. It
9 is a peer-reviewed, published review article.

10 THE COURT: I'm not sure what that means.

11 THE WITNESS: It is an article that's a review
12 article. The review article is reviewed by the same
13 process but usually it's from experts in the field
14 opposed to -- as opposed to just a regular manuscript.

15 Q. Doctor, is it your understanding, based upon
16 your experience and serving as a peer reviewer for
17 various journals, that those who write review articles
18 are usually invited to write the review article?

19 A. Yes.

20 Q. Is it your understanding that those who are
21 invited to write a review article are usually invited
22 because they are experts in the field?

23 A. Yes.

24 Q. Doctor, we have up on the screen the
25 February 2017 review article that we previously

1 referenced that was published in Gynecologic Oncology
2 which is the same journal you initially submitted your
3 manuscript to. Correct?

4 A. Yes.

5 THE COURT: This was published before the one
6 that was declined. Correct?

7 MR. LAPINSKI: That's correct.

8 THE COURT: This is 2017. His publication
9 that was declined was 2018?

10 THE WITNESS: Yes.

11 Q. Doctor, what is the first highlight of the
12 review article you published in 2017?

13 A. "Oxidative stress plays an essential role in the
14 pathogenesis of ovarian cancer."

15 That's the take-home message.

16 Q. That take-home message from your February 2017
17 review article that was published in Gynecologic
18 Oncology. In your opinion what is the difference
19 between that take-home message and what Reviewer No. 1
20 said is not present in the manuscript that you are
21 submitting?

22 A. There is no difference.

23 Q. You've previously been published on the topic
24 that Reviewer 1 said is not supported. Correct?

25 A. Correct.

1 Q. If we could take a look at the comments of
2 Reviewer No. 2.

3 THE COURT: My understanding is, what they
4 were saying is that -- in this criticism was that that
5 statement, however, was not supported by this
6 particular investigation or study. That's what the
7 statement is as opposed to a general proposition which
8 was, I guess, the highlight in the first article.
9 They are referring to the actual investigation that
10 underlies the article. Correct? Isn't that what the
11 criticism is?

12 THE WITNESS: Yes.

13 Q. Dr. Saed, a question I would have for you is,
14 first, do you agree with the comments that Reviewer
15 No. 1 had in regard to your statement that oxidative
16 stress is a key mechanism in the initiation and the
17 progression of ovarian cancer, is not being supported
18 by your investigation?

19 A. No, I disagree.

20 Q. Doctor, have you previously researched and
21 published on that issue?

22 A. Yes, I did.

23 Q. Doctor, in your opinion, the research, the
24 manuscript that you submitted did support that
25 statement?

1 A. Yes.

2 Your Honor, the same reviewer is commenting,
3 saying that the conclusions are supported by the
4 results.

5 Q. Dr. Saed, we are now going to the comments of
6 Reviewer No. 2.

7 THE COURT: That's a general comment because
8 it says -- I don't want to argue with the witness.
9 But it just says, the current in vitro study does
10 involve novel information, but there are some
11 important limitations described below, and one was the
12 third criticism. I don't think you take the first
13 statement in the reviewer's comments in a vacuum.

14 MR. LAPINSKI: Understood, your Honor.

15 Q. Dr. Saed, what were the comments of Reviewer No.
16 2?

17 A. The Reviewer No. 2 basically is saying that my
18 work with talcum powder will be enhanced if we could
19 show transformation evidence, of cell transformation.
20 And he suggested to show cell transformation, at least
21 to do cell proliferation and apoptosis assays.

22 Q. Dr. Saed, what did you do as a result of the
23 comments that were provided by Reviewer No. 2?

24 A. I was doing a cell proliferation and apoptosis,
25 and I combined the data on my cell proliferation and

1 apoptosis, and I resubmitted the whole thing to
2 Reproductive Sciences.

3 Q. You resubmitted your manuscript including
4 research you had done on cell proliferation and
5 apoptosis?

6 A. Yes.

7 Q. That's what Reviewer No. 2 recommended that you
8 do?

9 A. They recommended cell proliferation and
10 apoptosis.

11 Q. Was the manuscript your submitted to
12 Reproductive Sciences accepted for publication?

13 A. Yes.

14 Q. Was that manuscript published?

15 A. Yes.

16 Q. When that manuscript was submitted to
17 Reproductive Sciences for publication, was that
18 manuscript and the work you had done reviewed by
19 experts?

20 A. Yes.

21 Q. What is your understanding as to the number of
22 experts that would have reviewed your work at that
23 time?

24 A. At least two.

25 THE COURT: Did you go back and do further

1 work? Is that what you are suggesting? Or did you
2 simply change how it was being represented?

3 THE WITNESS: No, I did cell proliferation and
4 apoptosis.

5 THE COURT: You did further study and
6 investigation?

7 THE WITNESS: I was in the process of doing it
8 when I submitted the paper to GYN Oncology. I did
9 apoptosis, and I was in the process of doing
10 proliferation, and I wanted to publish them in a
11 separate manuscript. When the comments came in, I
12 decided to combine everything and send them to
13 Reproductive Sciences.

14 THE COURT: The manuscript you finally
15 submitted or the abstract you submitted to the other
16 journal had new information in it?

17 THE WITNESS: Yes.

18 Q. Dr. Saed, the activity that you are discussing
19 related to proliferation and apoptosis, they were
20 tests that were done on Johnson's Baby Powder.
21 Correct?

22 A. Yes.

23 Q. Dr. Saed, going back to the peer review process,
24 after your manuscript had been accepted for
25 publication by Reproductive Sciences, did you submit

1 the results of your research for further consideration
2 and publication?

3 A. Yes. We submitted an abstract to the 50th
4 annual meeting of Society of Gynecologic Oncology, and
5 this is looking at the effect of Johnson Baby Powder
6 on gene mutation.

7 Q. That submission, Doctor, to your understanding,
8 how many experts reviewed that submission prior to it
9 being accepted?

10 A. My understanding, abstracts are reviewed at
11 least by four experts in the field.

12 Q. Doctor, did you present or did you submit for
13 expert review and consideration your research another
14 time?

15 A. Yes. Also, I presented my work in the 66th
16 annual meeting of Society of Reproductive
17 Investigation, which was held in Paris last March, and
18 this work was also reviewed by at least four experts
19 in the field.

20 THE COURT: Is this the same as the poster
21 that's mentioned or is this something different?

22 THE WITNESS: The last two?

23 THE COURT: I know in reading the materials
24 there was something about the 50th annual meeting, and
25 it was talking about a poster being submitted. I want

1 to make sure I have the right things in mind.

2 Q. Dr. Saed, in regard to your submission to the
3 Society of Gynecologic Oncology, could you please
4 explain to the Court the process of the submission and
5 how the poster presentation plays into that
6 submission?

7 A. Your Honor, this is an abstract that's submitted
8 to the Society of Gynecologic Oncology meeting in
9 Honolulu in March, and it was presented by Dr. Harper,
10 a fellow in my lab, and it is about the effect of
11 talcum powder, Johnson & Johnson Baby Powder, on gene
12 mutations. It was a poster, yes.

13 Q. Doctor, could you please explain to the Court
14 the relevance of your research being presented as a
15 poster at the meeting as compared to it being accepted
16 as an abstract?

17 A. Most abstracts get accepted and the reviewer
18 will decide the method of presentation. They either
19 give you an oral presentation or poster presentation.

20 MR. LAPINSKI: For the record, the poster
21 presentation that relates to the March 2019 SRI
22 meeting, is in your binder, and it is marked as PSC
23 Saed 3?

24 THE WITNESS: That's the cell proliferation
25 and apoptosis.

1 Q. Dr. Saed, since the time that you started your
2 research related to talcum powder, how many
3 independent experts have reviewed your work?

4 A. I would say at least 20.

5 Q. Have any of those experts questioned the
6 methodology that you employed in conducting your
7 research?

8 A. No.

9 Q. Have any of those experts criticized the
10 methodologies you used in conducting your research?

11 A. No.

12 Q. Dr. Saed, do you believe that the work that you
13 did is subject to any conflicts that need to be
14 disclosed?

15 A. No.

16 Q. Why is that?

17 A. I don't believe I have a potential financial
18 interest from this work. So I don't think there is a
19 conflict of interest. I checked with the Society of
20 Gynecologic Oncology, and I checked with SRI, and when
21 you submit abstracts, you are not required to submit a
22 conflict of interest. I actually called them by phone
23 and checked and made sure I'm doing the right thing,
24 and I asked them -- I'm doing this as part of this
25 litigation. I'm doing this work in my lab. Is this

1 considered a conflict of interest? My understanding,
2 they explained to me, the conflict of interest is when
3 you have a commercial entity that will fund your lab
4 to develop a product that you have a potential
5 financial interest in it.

6 Q. Dr. Saed, who paid for the research that you
7 conducted related to Johnson's Baby Powder?

8 A. My lab.

9 Q. Dr. Saed, if your research had shown that there
10 was no biologic activity when testing Johnson's Baby
11 Powder, would you have attempted to publish your
12 research anyway?

13 A. Yes.

14 Q. If you had found there was no biologic activity
15 as a result of the exposure of cells to Johnson's Baby
16 Powder, what would your opinion have been?

17 A. My opinion would be at the molecular level,
18 talcum powder exposure does not change the molecular
19 level of cells.

20 Q. Dr. Saed, if you don't believe you have a
21 conflict, why is it you included a disclosure of
22 potential conflicts in the manual you submitted to
23 Reproductive Science?

24 A. I was criticized by Johnson & Johnson lawyers
25 why I didn't put this. So in the revision when I got

1 the paper, the manuscript, I decided to add it in.

2 Q. As you sit here now, do you believe there is a
3 conflict of interest related to the work you did in
4 regard to Johnson's Baby Powder?

5 A. No.

6 Q. What input did plaintiffs' lawyers have into the
7 design of the research that you conducted?

8 A. None.

9 Q. What input did plaintiffs' lawyers have into the
10 methodologies that you employed in conducting your
11 research?

12 A. None.

13 Q. What input did plaintiffs' lawyers have into the
14 outcome of your research?

15 A. None.

16 Q. Did plaintiffs' lawyers have any input into any
17 aspect of the research that you conducted?

18 A. The only thing, your Honor, I was asked by them
19 is to test -- I initially started with talcum powder
20 from Fisher. They asked me if I could test with it
21 Johnson & Johnson Baby Powder. That's the only thing
22 they told me.

23 MR. LAPINSKI: Judge Wolfson, do you have any
24 questions for Dr. Saed in regard to the methodologies
25 he employed or the reliability of the methodologies he

1 employed?

2 THE COURT: Not at the moment. I'll wait for
3 the cross-examination, and I know you have redirect.

4 Q. Doctor, are you aware of the claims being made
5 in this litigation?

6 A. Yes.

7 Q. What is your understanding of the claims that
8 are being made?

9 A. That genital use of Johnson & Johnson Baby
10 Powder subject patients to or individuals, women to
11 increased risk of ovarian cancer.

12 Q. Doctor, are your opinions -- strike that.

13 Doctor, is the research you conducted and the
14 opinions you provided relevant to this litigation?

15 A. Yes.

16 Q. Why do you think so?

17 A. Because showing an effect at the molecule level,
18 at the cell level, especially showing the
19 transformation process, the gene mutations, the
20 uncontrolled cell division, and most importantly,
21 showing that if you expose normal ovarian cells to
22 Johnson & Johnson Baby Powder, you can mimic exactly
23 what you see in what we see in ovarian cancer hallmark
24 is significant, and it indicates that the exposure to
25 this powder will push the cells towards

1 transformation.

2 MR. LAPINSKI: Your Honor, unless you have any
3 questions, I'm finished with my questioning.

4 THE COURT: This is a good time to break and
5 we'll come back and start the cross. Let's try and do
6 about 45 minutes.

7 Thank you.

8 THE DEPUTY CLERK: All rise.

9 (The luncheon recess is taken.)

10 (Continued on the next page.)

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1 A F T E R N O O N S E S S I O N

2

3 THE DEPUTY CLERK: All rise.

4 THE COURT: Thank you.

5

6 **GHASSAN SAED**, resumed.

7

8 CROSS-EXAMINATION

9 BY MR. WILLIAMS:

10 Q. Dr. Saed. Good afternoon, Dr. Saed.

11 A. Good afternoon.

12 Q. Have we met before?

13 A. No.

14 Q. My name is Bart Williams, and I represent
15 Johnson & Johnson, and I have some questions for you
16 this afternoon.

17 In front of you you should have two binders,
18 No. 1 and No. 2. Those will have exhibit numbers I
19 will identify.

20 MR. WILLIAMS: For the record, the volumes the
21 witness has and defense counsel has, we have two
22 different volumes because they are two-sided copies.
23 The copies for the Court staff and the Court are
24 one-sided --

25 THE COURT: Were you warned about that? I do

1 like single-sided because it is easier for me.

2 MR. WILLIAMS: That third binder is one
3 exhibit. Exhibit P-298. We may not use it. So the
4 third binder can be set to the side.

5 Also, there is a red binder that contains the
6 prior testimony of Dr. Saed for the Court, for
7 counsel, and for the Court's clerk.

8 Q. Dr. Saed, you are not a gynecological
9 oncologist?

10 A. No.

11 Q. You are not a medical doctor?

12 A. No.

13 Q. You do not treat patients?

14 A. No.

15 Q. I would like to ask you to speak up, if you
16 would.

17 I would like you to think back to August of
18 2017 when you were first contacted by plaintiffs'
19 counsel to do work in this case. Do you have that
20 timeframe in mind?

21 A. Yes.

22 Q. August 2017?

23 A. Yes.

24 Q. You were first contacted by plaintiffs' counsel,
25 the Beasley Allen law firm, in the middle of August

1 2017. Right?

2 A. Sometime in August. I can't remember the exact
3 date.

4 MR. WILLIAMS: Your Honor, I would like to
5 read from the red notebook. It is the first tab from
6 Dr. Saed's testimony from January 23rd, 2019, page 25,
7 line 2.

8 "QUESTION: Do you recall the date of your
9 first contact by Beasley Allen?

10 "ANSWER: Around the middle of August."

11 Is that accurate sir?

12 A. Yes.

13 Q. At that time, the middle of August 2017, you had
14 never conducted a study involving talc. True?

15 A. True.

16 Q. In fact, you had never done a laboratory study
17 of any kind involving talcum powder?

18 A. True.

19 Q. True or not true: When the plaintiffs'
20 attorneys first contacted you in August 2017, you had
21 already formed the opinion that talc induces ovarian
22 cancer?

23 A. Not true.

24 Q. Let me have you --

25 MR. WILLIAMS: Your Honor, if I may, I would

1 like to read from the first day of Dr. Saed's
2 deposition. It is tab 1 in the red binder. It is
3 page 31, line 24 through page 32, line 3. Paragraph.

4 Q. Doctor, do you recall being asked the following
5 question and giving the following answer?

6 "QUESTION: Sure. As of the time you received
7 the call from Ms. Thompson, what opinion did you have
8 with regard to talc and ovarian cancer?

9 "ANSWER: That talc is a potential inducer of
10 inflammation and it induces and increases the risk of
11 ovarian cancer."

12 Was that the question you were asked and the
13 answer you gave?

14 A. Your Honor, I mixed up between opinion and
15 conclusion.

16 Q. May you speak into the microphone.

17 A. When I was contacted by Dr. Thompson, I was
18 already exposed to the media and seeing that the story
19 of ovarian cancer and talcum powder were linked.
20 That's what I was referring to.

21 THE COURT: Based on the media you had an
22 opinion?

23 THE WITNESS: No.

24 THE COURT: I didn't understand your answer.
25 That's what I thought you were just saying. I know

1 you are distinguishing opinion and conclusion?

2 THE WITNESS: When I heard the media talking
3 about ovarian cancer, my specialty what I do in our
4 lab is ovarian cancer. So when you hear something
5 that is causing ovarian cancer, it would be in a
6 particular interest to me to test it out.

7 THE COURT: That wasn't the question. I'll
8 allow you, Mr. Williams, to ask it again and see if he
9 can listen carefully and answer his question.

10 BY MR. WILLIAMS:

11 Q. My question is this, sir: At the time when you
12 were first contacted by plaintiffs' counsel, you had
13 the opinion that talc is a potential inducer of
14 inflammation and it induces increased risks of ovarian
15 cancer. Right?

16 THE WITNESS: Your Honor, again, maybe what it
17 says there, maybe that's what I said, but let me
18 explain. I need to explain this.

19 THE COURT: You'll have an opportunity if you
20 want. The question is: Are you answering it today or
21 are you accepting the answer you gave in your
22 deposition? That was your testimony. Correct?

23 THE WITNESS: At that time I did not have an
24 opinion.

25 Q. So you are backing off of the testimony that you

1 gave during your deposition. Is that accurate?

2 A. Can I explain?

3 Q. That's okay. I'll move on.

4 THE COURT: Does he have his deposition in
5 front of him?

6 MR. LAPINSKI: Can we make sure?

7 MR. WILLIAMS: Actually, that's not required
8 by the rule, but we will do that.

9 THE COURT: Since he is accepting what you are
10 reading, I want him to have an opportunity to look at
11 it and see what it says.

12 MR. WILLIAMS: May I approach, your Honor?

13 THE COURT: Yes.

14 (Pause.)

15 THE COURT: Page 31 of your deposition, bottom
16 of the page on 31.

17 (Pause.)

18 THE COURT: Is that what you said?

19 THE WITNESS: Yes.

20 THE COURT: I heard what you said. Do you
21 still agree with that testimony or are you backing off
22 of that testimony? That's his question.

23 THE WITNESS: I agree with the testimony, yes.

24 Q. I would like to talk about your opinions
25 regarding causation in this matter.

1 As we have been discussing already today with
2 plaintiffs' counsel. It is your opinion Johnson's
3 baby powder can cause ovarian cancer in humans.

4 Correct?

5 A. Yes.

6 Q. It was your objective in preparing your opinion
7 in this case to determine whether the use of talcum
8 powder causes ovarian cancer in humans. Correct?

9 A. No.

10 Q. It was your objective to determine whether the
11 use of talcum powder poses an increased risk of
12 ovarian cancer. True?

13 A. My objective was to determine if exposure of
14 cells, normal ovarian cells to talcum powder will
15 induce an inflammatory reaction of the redox balance
16 in the same way that we know it mimics what we see in
17 ovarian cancer. That's my objective.

18 Q. The opinion you have given here, both in your
19 report and here today, is that Johnson's Baby Powder
20 can cause ovarian cancer. Right?

21 A. Yes.

22 Q. And you are testifying now that was not your
23 objective?

24 A. Not true. We are mixing up stuff here. I need
25 to explain this. You are mixing up between objective,

1 the objective of my experiments that I did, and then
2 the opinions that I reached based on not only the
3 experiments that I did but also on the literature that
4 is published, and also on other people who did the
5 same work with talcum powder and cell culture.

6 Q. Are you or are you not providing an opinion that
7 talcum powder can cause ovarian cancer in humans?

8 A. Yes.

9 Q. And you have provided the opinion that it can?

10 A. Yes.

11 Q. Your opinion that talcum powder can cause
12 ovarian cancer is based upon your in vitro experiments
13 in part. Correct?

14 A. Correct.

15 Q. Now, you say talc can result in the development
16 of ovarian cancer; true? That's how the phrasing is
17 in your report. Do you remember that?

18 A. Yes.

19 Q. Do you believe talc exposure can cause other
20 gynecological cancers?

21 A. Believe this on what, my expertise?

22 Q. Based on anything. Your expertise, what you
23 have studied, the analysis you did in this case.

24 A. I only examined the effect of talcum powder on
25 normal epithelial ovarian cells. I did not test other

1 gynecologic cancers.

2 Q. Weren't tests done on fallopian cells?

3 A. Fallopian is an epithelial that is believed to
4 be the source of where ovarian cancer starts. So it's
5 relevant to ovarian cancer.

6 Q. You do not cite any studies in your expert
7 report showing an increase in other gynecological
8 cancers associated with perineal talc use. Correct?

9 A. I did not study other gynecologic cancers.

10 Q. You did not cite any studies showing an
11 association between talc uses and vagina cancer?

12 A. I did not study. This is not my specialty.

13 Q. The same with cervical cancer?

14 A. I'm only interested in ovarian cancer. That's
15 my lab focus and this is my research.

16 Q. The same with uterine cancer. Is that right?

17 A. Yes.

18 Q. You performed in vitro experiments using
19 Johnson's Baby Powder. Right?

20 A. Yes.

21 Q. In vitro experiments refers to experiments done
22 with cell lines in a laboratory. In vivo
23 experimentation refers to experiments done on animals.
24 Right?

25 A. And humans.

1 Q. You conducted only in vitro experimentations for
2 your report in this case. Right?

3 A. Yes.

4 Q. You did not try to replicate the results of your
5 results that you had received from your in vitro work
6 in an in vivo model. Right?

7 A. I did not need to.

8 Q. My question was whether you did or did not. You
9 did not do any in vivo studies. Correct?

10 A. Yes.

11 Q. Can you and I agree that in vivo animal studies
12 are important to determining whether a substance can
13 cause cancer in humans?

14 A. Not necessarily. I disagree.

15 Q. Isn't it true that you believe that an in vitro
16 model can be a good predictor of carcinogenicity in
17 human beings if the same effect is replicated in vivo?

18 A. You don't need to. The gold standard to figure
19 out a mechanism by which an agent affect induces a
20 specific biological effect at cell level is sufficient
21 to draw the conclusion that I did.

22 Q. When have you ever classified a substance as a
23 carcinogen based on the result in an in vitro model?

24 A. Like a specific substance you are talking about?

25 Q. Yes.

1 A. You mean looking at transformation assays? What
2 are you referring to?

3 Q. I'll ask the question again:

4 If ever, when have you, Dr. Saed, ever
5 classified a substance as a carcinogen based on the
6 results of an in vitro model?

7 A. Yes, now I understand.

8 THE WITNESS: Your Honor, all of the work I
9 did for the last 25 years is looking at mechanisms of
10 how ovarian cancer develops, and cause, and these
11 mechanisms are the ones that are replicated when we
12 expose cells to Johnson & Johnson Baby Powder.

13 I studied the mechanisms that cause ovarian
14 cancer, and we have published extensively in this
15 field, and these mechanisms are replicated when cells
16 were exposed to Johnson & Johnson Baby Powder.

17 Q. As you sit here today, Dr. Saed, do you believe
18 an in vitro model is a good predictor to determine
19 whether a substance is a carcinogen or not if the same
20 effect is replicated in vivo? Do you believe that or
21 not today?

22 A. If the same effect is replicated in vivo?

23 Q. Yes.

24 A. I'm confused. It is two parts. Can we refer to
25 one part at a time.

1 Q. I would like to read from Dr. Saed's testimony
2 from page 333, tab 1, of the binder, line 5, through
3 333, line 12.

4 Here is my question to you, Doctor:

5 Were you asked the following question, and did
6 you give the following answers, on line 5:

7 "QUESTION: When have you ever classified a
8 substance as a carcinogen based on the result in an in
9 vitro model?

10 "ANSWER: In vitro model is a good predictor
11 to determine whether a substance is carcinogenic or
12 not if the same effect is replicated in vivo.

13 "QUESTION: You did not replicate your results
14 in an in vivo model. Correct?

15 "ANSWER: Not yet."

16 Were those the questions you were asked and
17 the answers you gave?

18 A. What page are you reading from, please?

19 Q. 333, line 5, through 333, line 12?

20 MR. WILLIAMS: This, your Honor, is the reason
21 I didn't want to --

22 THE COURT: Without looking at the testimony,
23 do you recall giving that testimony?

24 THE WITNESS: Yes.

25 THE COURT: We can move on.

1 Q. You cannot cite a single instance in which a
2 carcinogen has been identified in humans based solely
3 on an in vitro model. True?

4 A. No, I can cite the effect of viruses on cells,
5 they induce carcinogenic. They make cells cancer. I
6 can cite many publications that show carcinogenic
7 agents can induce and make cells and transform in
8 vitro. I can cite that. There are several studies.

9 MR. WILLIAMS: Your Honor, for this we would
10 like to show the videotape of the question and answer,
11 if we could cue up clip No. 8. It appears on page
12 333, line 2, through 333, line 4.

13 (The video was played.)

14 "QUESTION: Cite for me an instance when a
15 carcinogen has been identified in humans based solely
16 on an in vitro model.

17 "ANSWER: I can't remember."

18 BY MR. WILLIAMS:

19 Q. Now, you have done in vivo studies on animals
20 before and you have studied many, many animal models
21 over the years. Is that true?

22 A. Yes.

23 Q. In this litigation, even though you did not
24 conduct in vivo animal experiments, you still
25 concluded Johnson's Baby Powder can cause ovarian

1 cancer. Correct?

2 A. Yes.

3 Q. Did your in vitro experiments determine whether
4 talc exposure causes cancer in humans -- not in cell
5 lines in a petri dish, but in humans?

6 A. Could you repeat that.

7 Q. Did your in vitro experiments determine whether
8 talc exposure causes ovarian cancer in humans, not in
9 cell lines in a petri dish, but in humans? Do you
10 have an answer, sir?

11 A. Yes. My work was done in in vitro and cell
12 lines. I did not do any in vivo studies in humans.

13 Q. One reason you have given us for not using an in
14 vivo animal model is that you lacked the time to do
15 it. Is that correct?

16 A. And the money.

17 Q. And the other reason is that you lacked the
18 money. Is that right?

19 A. Yes.

20 Q. So time and money are the reasons why those
21 studies have not yet been done by you?

22 A. Not the only reason.

23 Q. Those are among the reasons. Correct?

24 A. Yes.

25 Q. Those are the reasons you explained to us in

1 your deposition?

2 A. Among the reasons, yes.

3 Q. Do you remember giving another reason other than
4 time and money?

5 A. Yes. The experiments I did in vitro with the
6 cell lines is sufficient to draw my opinion.

7 Q. If it is not necessary for purposes of
8 determining causation that in vivo studies be done,
9 why is it that you are planning to do biological work
10 looking at talc and ovarian cancer if you've already
11 done enough?

12 A. If I already did in vitro studies -- I'm sorry.
13 I don't understand the question.

14 Q. You just testified a moment ago that it is not
15 necessary to do in vivo studies because you already
16 did in vitro studies, did you not?

17 A. To get to my opinion, yes.

18 Q. If it is not necessary to get to your opinion on
19 causation to do in vivo studies, then why use the time
20 or money to do those studies?

21 A. I didn't do them anyways. I didn't do in vivo
22 studies. I did not.

23 Q. I understand you didn't do them. My question is
24 if they are unnecessary because you have already done
25 in vitro studies, why is it that you have testified

1 that it is your plan to do in vivo animal studies?

2 A. Our finding, in vitro studies will be enhanced
3 if we can replicate it in a mouse model, an animal
4 model.

5 Q. That's kind of my point. You cannot say one way
6 or the other, Professor, whether an in vivo animal
7 model will replicate or contradict the results of the
8 in vitro experiments that you have already performed.
9 Isn't that right?

10 A. That's not true. That's not right. Because the
11 gold standard, using cell lines, when you want to
12 delineate to determine the effect of a substance and
13 find out the mechanism of how it creates this effect,
14 you cannot even use an animal model. You have to use
15 cell lines. So there is no escape from using cell
16 lines. This is the gold standard.

17 And my lab, my interest is to determine the
18 mechanism of how this effect is developing the cells,
19 pushing the cells to become ovarian cancer. I am not
20 interested in the in vivo effect. My lab is
21 interested in determining mechanisms, and to determine
22 mechanisms you do mechanisms and cell culture in
23 vitro. That's my understanding.

24 Q. Just so we're clear, is it your testimony this
25 afternoon that you can know the results of an in vivo

1 experiment before you run it?

2 A. It is not my testimony. I didn't say that.

3 Q. Isn't it true that you are interested in what
4 the in vivo studies would show?

5 A. I just said that it will enhance the finding,
6 but it will not by itself stand to determine a
7 mechanism, and that's what my interest is.

8 Q. Do you believe that it would be contrary to
9 scientific method to purport to know what the results
10 of an in vivo study would be before the study is
11 conducted?

12 A. I didn't draw any conclusion before the study
13 was conducted. I don't know where you got that from.

14 Q. My question is different. My question is: Do
15 you believe that it would be proper scientific method
16 to purport to know what the result of an in vivo study
17 would be before the in vivo study is even conducted as
18 a matter of methodology?

19 A. I'm not objecting to know if someone else did
20 it. Yes, that's fine.

21 THE COURT: That wasn't his question.

22 Q. I'll restate it.

23 THE COURT: Okay.

24 Q. Do you think it would be proper scientific
25 method for a scientist to say: I know what the result

1 of an in vivo study will be because I don't need to do
2 that because I have done an in vitro study?

3 A. But I didn't say that.

4 Q. I'm asking whether you think that would be
5 proper scientific method; do you believe it is proper
6 or not?

7 A. A scientist is always open to know everything.
8 This is my personality.

9 Q. I'll move on.

10 Let me ask you about some of the animal
11 studies that you say you have read in your report.
12 And I would like to direct your attention to the
13 binder that's in front of you. And if you would look
14 in the first binder and look for Exhibit C 17, and
15 that is a copy of your report. I'll direct your
16 attention to page 22 of Exhibit C 17.

17 MR. LAPINSKI: Your Honor, if I could note for
18 the record, prior to Dr. Saed's January 23rd
19 deposition, he had provided a report that had made
20 additional notations of research that he had reviewed
21 and relied upon. I don't know whether it is going to
22 be at all related to the questions Mr. Williams is
23 going to be asking here, but I would like him to have
24 the opportunity also to look at that report.

25 THE COURT: Let's see where it goes,

1 Mr. Williams.

2 MR. WILLIAMS: I have no objection to him
3 looking at that report.

4 BY MR. WILLIAMS:

5 Q. At the time you gave your initial opinions in
6 this case -- and I'm directing your attention to page
7 22 of Exhibit C 17. Do you have that in front of you?

8 A. Yes.

9 Q. The numbers I'm referring to in your report are
10 the numbers that appear at the very top in blue
11 writing. Do you see that? And it tells you page 22
12 of 139.

13 A. Okay.

14 Q. Do you have that page in front of you?

15 A. Yes.

16 Q. You gave the opinion these opinions were made to
17 a reasonable degree of scientific certainty and are
18 based on your experience, training and expertise.
19 Correct?

20 A. Correct.

21 Q. And it says that it is based on a knowledge of
22 the relevant scientific literature and your previous
23 and ongoing research. Right?

24 A. Yes.

25 Q. In your reports you have cited literature in

1 support of certain sentences that appear in the
2 report. True?

3 A. Yes.

4 Q. Look at page 11 of your report -- and, again,
5 this is referring to the top pages, the page numbering
6 at the top of the page, and it is the last sentence
7 that carries over, the last sentence that says,
8 "studies that expose lab animals." Do you see that?

9 A. Yes.

10 Q. You wrote:

11 "Studies that exposed lab animals, rats, mice,
12 and hamsters to asbestos-free talcum powder in various
13 ways have had mixed results with some showing tumor
14 formation, and others finding only inflammation."

15 Do you see that?

16 A. Yes.

17 Q. You did not review all of the animal studies
18 that look at talc and ovarian cancer when forming your
19 opinions in this case; did you?

20 A. All of them?

21 Q. Right.

22 A. No.

23 Q. You did cite some studies at the time you gave
24 your opinions. True?

25 A. Yes.

1 Q. And your citation 50 and 51. Do you see that at
2 the end of the sentence?

3 A. Yes.

4 Q. You expressly cited two studies in your report,
5 and those are the only two studies you cite in there
6 at the time you rendered your opinions. True?

7 MR. LAPINSKI: Your Honor, for the record,
8 Dr. Saed's report submitted on January 23rd in these
9 specific footnotes, he did add an additional footnote.

10 MR. WILLIAMS: I recognize that. I'm trying
11 to go back to the time he originally rendered his
12 opinion, your Honor.

13 THE COURT: That's fine.

14 BY MR. WILLIAMS:

15 Q. We can agree those are the only two studies you
16 cited at that time. Correct?

17 A. Yes.

18 Q. The first of those two studies cited at end note
19 50 is a 1967 study by Graham entitled, "Ovarian Cancer
20 and Asbestos." Do you remember that?

21 A. Yes, but I believe that I fixed it.

22 Q. This 1967 Graham study is about asbestos
23 exposure, not talc. Right. I think.

24 Do you remember that?

25 A. Yes. I think I fixed this.

1 Q. Let me have you look at Exhibit A 49 in your
2 binder. It is a copy of the Graham study. The last
3 sentence of the abstract says: "These observations
4 are compatible with the thesis asbestos is an
5 ideologic factor in ovarian cancer."

6 Do you see that?

7 A. Yes.

8 Q. Does that refresh your memory the Graham study
9 was not a study on animals related to talc but rather
10 a study relating to asbestos?

11 A. Your Honor, I have to read the whole manuscript
12 in order to remember. You are quoting one sentence
13 from a whole study.

14 THE COURT: Do you remember the study?
15 Obviously, you cited it in your report.

16 THE WITNESS: Yes, but I don't remember
17 everything in the study.

18 Q. Do you remember the study mentioning the talc
19 anywhere?

20 A. I just want to know, your Honor, is this the one
21 that I switched, that I changed?

22 Q. We haven't gotten there, sir.

23 A. If it is the wrong citation --

24 Q. This is not the one that's the wrong citation.
25 As you sit here now, I will represent to you the word

1 talc does not appear anywhere in the study, that the
2 study is about asbestos.

3 As you sit here now testifying to Her Honor,
4 are you able to testify, as you stated in your report,
5 that the Graham and Graham study is a study that
6 exposed lab animals to asbestos free talcum powder and
7 found certain results, can you say that under oath?

8 A. I have to read the manuscript.

9 Q. Let's talk about the second study you cited in
10 your report, which is item 51, endnote 51; and this is
11 what I think you were referring to a moment ago, but
12 we'll see.

13 Endnote 51 is a 2004 study by Langseth,
14 entitled, "Ovarian Cancer, Cancer and Occupational
15 Exposure Among Pulp and Paper Employees in Norway."

16 Do you recall that study?

17 A. This is what it says in the reference here in my
18 article, yes.

19 I believe, your Honor, this is the reference
20 where I changed. If I acknowledge it is a mistake and
21 I changed it, why are we going back?

22 Q. Let's do that now. You were provided a
23 supplemental -- strike that.

24 Plaintiffs' counsel provided the defense a
25 supplemental list of materials that you reviewed, and

1 one of the items listed was the briefing of the
2 parties in this case.

3 Have you read the briefing of the parties in
4 this case as it relates to you?

5 A. I read the whole briefing, no. I just read some
6 of it.

7 Q. It was listed on a list of items that you had
8 reviewed. Are you saying you did not review the
9 briefs?

10 A. They provided me with a list of items to review,
11 yes.

12 Q. Let's take a look at it.

13 If we could call up Saed 501. Plaintiffs'
14 counsel wrote: "Dr. Saed mistakenly cited Langseth
15 2004 instead of Langseth 2008, which is an animal
16 study."

17 Let me ask you this: Did you in fact intend
18 to cite Langseth 2008 in your paper as opposed to
19 Langseth 2004?

20 A. Yes.

21 Q. Let's take a look at Langseth 2008. It is
22 Exhibit A 88 in your first binder.

23 I would direct your attention to page 4, using
24 the numbers at the top of the page at the border, at
25 the top of the page, left-hand column. There is a box

1 that appears there. Do you see that?

2 A. We are on A 88?

3 THE COURT: Yes. And the last page of that
4 exhibit.

5 Q. Do you have that in front of you?

6 A. Yes.

7 Q. There is a box there that says what this study
8 adds. Right? Do you see that box?

9 A. Yes.

10 Q. Now, let me ask you to turn to the previous
11 page. This is now page 3 in the right-hand column.
12 It says: "Proposal to research community," and it
13 reads as follows:

14 "The current body of experimental and
15 epidemiologic evidence is insufficient to establish a
16 causal association between peritoneal use of talc and
17 ovarian cancer risk."

18 Is that what it says?

19 A. Yes.

20 Q. In your report we just went over the Graham
21 study and Langseth 2008 as being studies that exposed
22 lab results to asbestos talcum powder and those
23 resulting in mixed results. Right?

24 A. Before I answer this, the next sentence says:

25 "Experimental research is needed to better" --

1 THE WITNESS: I feel, your Honor -- I feel a
2 problem cutting one sentence from a whole manuscript
3 and asking me about it, if you read the next sentence
4 right after that, it says, "experimental research is
5 needed," and that's what I did.

6 THE COURT: He's talking about studies that
7 you relied upon. And the question is whether, indeed,
8 these studies supported what you were saying that you
9 -- they did this kind of research.

10 The second sentence says that kind of study is
11 needed. That's not what this study did. He's asking
12 you why you relied upon it for that basis, for that
13 conclusion in your report when it is not what it says.

14 A. I relied on it as evidence there is an effect
15 that needs to be further experienced.

16 Q. Let's go back and clear that up.

17 If we could pull up C 17, your MDL report, and
18 the sentence that talks about what you actually said.

19 You wrote, this is page 12, carrying over to
20 13 of Exhibit C 17. You wrote:

21 "Studies that exposed lab animals, rats, mice,
22 and hamsters to asbestos-free talcum powder in various
23 ways have had mixed results with some showing tumor
24 formation and others finding only inflammation ."

25 That's what you wrote. Correct?

1 A. Yes.

2 Q. Langseth 2008 did not involve laboratory animal
3 studies. Can we agree on that?

4 A. I have to read the whole -- I don't know.

5 Q. You can't say one way or the other as you sit
6 there. Right?

7 A. I have to read the manuscript to be able to
8 remember what I said.

9 Q. Now, counsel, when he was objecting a moment
10 ago, referenced another item that you read that
11 supported this sentence. Do you remember that?
12 Counsel objected and he said there was another study
13 added that you read.

14 A. Keep going.

15 Q. Do you remember what the other study is that
16 supposedly supports this sentence that appears in your
17 report at pages 12 and 13?

18 A. I referenced in the new report the independent
19 study.

20 Q. Is the independent 1993 study and the two that
21 you've cited on page 12 and 13, are those the only
22 studies upon which you are relying for the proposition
23 I read three times on pages 12 and 13?

24 A. As far as animal studies?

25 Q. As far as the proposition that you cite on pages

1 12 and 13?

2 A. Using the effect on animals in vivo?

3 Q. Yes.

4 A. Yes.

5 Q. Are you aware of animal studies that actually
6 have looked at talc exposure in the ovaries?

7 A. I am aware of a study that injected talc into
8 the perineal cavity of an animal and looked at the
9 severe inflammation of that, yes.

10 Q. Is that the 2009 study?

11 A. I can't remember dates.

12 THE COURT: He's asking if you recognize the
13 author's name of the study?

14 THE WITNESS: No.

15 Q. Let me ask you to look in your book at Exhibit A
16 85?

17 MR. WILLIAMS: For the record, Exhibit A 85 is
18 a document entitled, "Does long-term talc exposure
19 have a carcinogenic effect on the female genital
20 system of rats, an experimental pilot study?"

21 Q. Have you read this study, sir?

22 A. No.

23 Q. Let me direct your attention to page 2 -- which
24 is the page we are on, the first page, the abstract,
25 and in the right-hand column it says:

1 "The experimental animals were allocated into
2 four groups having seven rats each. Groups 3 and 4
3 received intravaginal or perineal talc application
4 respectively. Talc was applied for three months on a
5 daily basis."

6 Did I read that right?

7 A. Yes.

8 Q. Let me direct your attention to the bottom of
9 postmenopausal column where it says, "Conclusions."
10 Do you see that?

11 A. Yes.

12 Q. It says, "Talc has unfavorable effects on the
13 female genital system. However, this effect is in the
14 form of foreign body reaction and infection rather
15 than being neoplastic." Did I read it correctly?

16 A. Yes.

17 Q. You had not read this study at the time you
18 rendered your opinions in this case. Correct?

19 A. I don't remember really.

20 Q. Did you review a paper called, "The Effects of
21 Talc on the Rat Ovary," written in 1984 called
22 Hamilton?

23 A. No.

24 Q. Let me have you look at Exhibit A 53.

25 MR. WILLIAMS: For the record, your Honor,

1 Exhibit A 53 is Hamilton 1984, "The Effects of Talc on
2 the Rat Ovary."

3 Q. Do you see it says under the summary, the first
4 line: "Exposure of rat ovaries to talc was a column
5 published by intrabursal injection." Do you see that?

6 A. Yes.

7 Q. "Intrabursal" here means the scientists here
8 injected the ovaries of the rats with talcum powder.
9 Is that what that means?

10 A. Yes.

11 Q. Now, if you look at page 4 of Exhibit A 53 in
12 the right-hand column above the photograph, it says:

13 "No evidence of cellular atypia or of mitotic
14 activity was seen in the nonpapillary areas of the
15 surface epithelium of the injected ovaries and in no
16 ovary was there any evidence of frank neoplasia." Did
17 I read that right?

18 A. Yes.

19 Q. Neoplasia refers to the formation of tumors;
20 does it not?

21 A. It does.

22 Q. In this study the rats were injected in their
23 ovaries with talcum powder, there was no evidence of
24 neoplasia was there?

25 A. That's what they think.

1 Q. As you sit here now, can you cite for the Court
2 a study that injected rats or other animals in their
3 ovaries with talcum powder where those ovaries showed
4 evidence of neoplasia?

5 THE WITNESS: Your Honor, the paper where they
6 injected talc in the cavity and found inflammation
7 other than that I don't have.

8 Q. There is a big difference between inflammation
9 on the one hand and neoplasia on the other. Can we
10 agree on that?

11 A. No.

12 Q. As far as you are concerned, neoplasia and
13 inflammation are one and the same?

14 A. I didn't say that.

15 Q. Then let me go back to my original question.

16 We can agree there is a big difference,
17 Doctor, between inflammation on the one hand and
18 neoplasia on the other; can we not?

19 A. I need to explain this.

20 Q. Go ahead.

21 A. What I'm saying is inflammation -- we have two
22 types of inflammation. If it is acute inflammation,
23 that has been shown it is acute. It goes for a while.
24 It comes back. That is not dangerous. The dangerous
25 type of inflammation, that's what I'm talking about,

1 is chronic inflammation where it persists for a long
2 period. That is linked in -- several studies to cause
3 cancer, yes.

4 Q. My question was different. My question was
5 whether the study -- that you can't remember the name
6 of, but that you are referring to that and talked
7 about placing talc in, I believe, the peritoneal
8 cavity, whether that study showed any actual neoplasia
9 with respect to ovarian cells?

10 A. It showed severe inflammation because they did
11 not expose it for a long period.

12 Q. It did not show neoplasia?

13 A. I don't remember. They are talking about
14 inflammation.

15 Q. Let's go back to Hamilton for one second. It
16 is Exhibit A 53, page 4. I read to you that paragraph
17 that ends with the word "neoplasia," but it goes on to
18 say in the next paragraph: "Foreign body granulomas
19 without any surrounding inflammation were seen in five
20 of the injected ovaries, usually cortical areas, and
21 similar lesions were not uncommonly noted in the supra
22 capsular fat and in the connective tissue matrix of
23 the capsule."

24 Did I read that right?

25 A. Yes.

1 Q. So the Hamilton study found granulomas.

2 Correct?

3 A. That's what you read, yes.

4 Q. Granulomas can result from pricking your finger
5 with a splinter, if there was any kind of foreign
6 body, separate from talc. You can have a granuloma.

7 A. I don't know. I do know that this is a
8 condition study. So based on the doses that he used,
9 based on their conditions, this is their finding. I
10 may agree with it. I may disagree with it.

11 My point I'm trying to tell you here,
12 inflammation -- chronic inflammation is linked, your
13 Honor, to the development, at the causation of ovarian
14 cancer. Period.

15 Q. That's the way you want to leave it?

16 A. That's how I understand it. There are many
17 researchers that say this and this. That's okay. But
18 we are talking about laboratory-evidence based here.

19 Q. Let me focus you now on that proposal that was
20 shown to you by plaintiffs' counsel. It is the
21 proposal that set forth your three aims. Do you
22 recall that document?

23 A. I do.

24 Q. You told us earlier you were not able to conduct
25 an in vivo animal experiment with talc because you did

1 not have the money to do so. Correct?

2 A. Correct.

3 Q. For your in vitro experiments you created what
4 you called a budget document entitled, "The Role of
5 Talc Powder Exposure in Ovarian Cancer, a Mechanistic
6 Approach." Right?

7 A. Yes.

8 Q. You prepared that document in September 2017?

9 A. Yes.

10 Q. That was about one month after you were first
11 contacted by the plaintiffs' attorneys, which occurred
12 in the middle of August 2017. We established that
13 earlier. Right?

14 A. Yes.

15 Q. You created the document before you started
16 doing any work in this case?

17 A. Not true. Let me explain this.

18 Q. Hold on. You said "not true"?

19 You did not start your work on this case until
20 the end of September or October of 2017. True?

21 A. May I -- let me see. When is the first time we
22 started working.

23 Q. Let me see if I can remind you with your
24 testimony. Take a look at the red binder, page 23 of
25 tab 1.

1 THE COURT: Dr. Saed, he's directing you to a
2 document.

3 Q. Page 23 of tab 1. That's your testimony, the
4 first day of your deposition. That was January 23rd,
5 2019. I'll direct your attention to page 23, line 24,
6 through page 24, line 5:

7 "QUESTION: When did that something start?
8 When is the first time that you spent any time on this
9 matter on behalf of Beasley Allen?

10 "ANSWER: So I started October maybe 1st of
11 October, maybe before that. I can't remember the
12 exact date.

13 "QUESTION: What is your best estimate?

14 "ANSWER: I would say end of September."

15 That's what you testified to during your
16 deposition. Correct?

17 A. Yes.

18 Q. Now, no one asked you to prepare the document
19 that is the proposal document. Right?

20 A. Yes.

21 Q. You prepared that document with care?

22 A. I don't understand what that means?

23 Q. Were you careful in analyzing the way you were
24 going to go about achieving the aims set forth in the
25 document?

1 A. Yes.

2 Q. After you completed that document you provided
3 it to the plaintiffs' lawyers who had not asked you
4 for it. Right?

5 A. I can't remember.

6 Q. You can't remember if they asked you for it or
7 you can't remember if you gave it to them?

8 A. I remember I gave it to them. I don't remember
9 if they asked me or not.

10 Q. Let's look at that document. We marked it as
11 B-25. It should be in your first binder.

12 Let's look at page 2, which is the page marked
13 at the top. It says, quote:

14 "The role of talc powder exposure in ovarian
15 cancer, the mechanistic approach."

16 Right?

17 A. Yes.

18 Q. The paragraph that follows describes your
19 laboratory's research area and some of its
20 accomplishments. Do you see that?

21 A. Yes.

22 Q. The next paragraph on page 2 describes prior
23 research on ovarian cancer including some of the
24 research your own lab has done -- and I'll refer you
25 to the line that has been highlighted, which was

1 underlined in your original report. Right?

2 A. Yes.

3 Q. And then at the bottom, the last sentence of
4 this paragraph on page 2 says, in italics, and
5 underlined:

6 "Here our objective is to determine whether
7 talc can induce such mutations in the key redox
8 enzymes contributing to the oncogenic phenotype."

9 Did I read that right?

10 A. Yes.

11 Q. Let's turn to page 3, the first paragraph.

12 Let me ask you this question, is it true as of
13 the time you wrote your proposal, you believed that
14 the direct link and precise mechanism between talc and
15 ovarian cancer had not been figured out?

16 A. I didn't do any work with talc before that, yes.

17 Q. At the time you wrote your proposal, you did not
18 believe that a direct link and precise mechanism had
19 been developed suggesting an association between talc
20 use and ovarian cancer. Right?

21 A. Yes. Not enough evidence.

22 Q. Say that again.

23 A. I believe there was not enough evidence. Maybe
24 we needed to do experiments.

25 Q. It wasn't until your experiments that you

1 believe that link was found?

2 A. Yes.

3 Q. Do you agree that one of the fundamental rules
4 for performing scientific analysis is that it should
5 be performed in a forward-looking and unbiased manner?

6 A. Yes.

7 Q. Should a scientist determine her or his
8 conclusion before she has done her tests?

9 A. No.

10 Q. Let's look at your third aim -- I want to start
11 with that one first, if I may. It is on page 4 of the
12 document. Do you see that?

13 A. Yes.

14 Q. Aim No. 3 was "Exposure to talc results in
15 neoplastic transformation of normal ovarian surface
16 epithelial cells."

17 You wrote that. Right?

18 A. Yes.

19 Q. That was a declarative sentence. Right?

20 A. No. That's a hypothesis-driven aim.

21 Q. This is your hypothesis?

22 A. Correct.

23 Q. The term "neoplastic transformation" refers to
24 normal ovarian cells changing into cancer cells.

25 Right?

1 A. Yes.

2 Q. In the next sentence of Aim No. 3 you write:

3 "To accomplish this aim," comma, and then you
4 go on. Right?

5 A. Yes.

6 Q. What you were doing here was saying, I have a
7 hypothesis and here is how I want to go about testing
8 that hypothesis. Is that fair?

9 A. Yes.

10 Q. The way that you said you would go about testing
11 the hypothesis was that you would "assess the ability
12 of talc exposure to cause neoplastic changes in normal
13 ovarian surface epithelial cells utilizing a
14 neoplastic transformation assay as previously
15 described." Did I read that right?

16 A. Yes.

17 Q. You never performed a neoplastic transformation
18 assay as described in Aim 3. Right?

19 A. Right.

20 Q. Let's go to the bottom of Aim 3. Do you see the
21 sentence that you had in bold and italics -- we've
22 highlighted it -- you wrote and emphasized:

23 "We expect that exposure of normal ovarian
24 surface epithelial cells to talc will result in
25 neoplastic transformation of these cells over time

1 which is critical in establishing a cause and effect
2 relationship."

3 You wrote that; right?

4 A. Yes.

5 Q. As a matter of fact, you never performed tests
6 to look for neoplastic changes in the cells. Correct?

7 A. Not correct.

8 Q. Have you ever done any test to look for
9 neoplastic changes in cells directly?

10 A. Yes.

11 Q. Let me have you look at your red binder, and
12 I'll direct you and the Court and counsel to page 465
13 of your first deposition, lines 2 through 4 --
14 actually, it is the second tab, the second day of your
15 deposition, Doctor, page 465, lines 2 through 4. You
16 were asked the following question and gave the
17 following answer:

18 "QUESTION: Have you ever done any test to
19 look for neoplastic changes in cells directly?

20 "ANSWER: No."

21 That was your answer to the question during
22 your deposition on February 14th, 2019. Correct?

23 A. Yes. But let me explain that.

24 Q. That's all right, Doctor. You'll do that
25 through plaintiffs' counsel in a moment, if that's

1 okay. I would like to move on.

2 Your aim was to describe to the reader how you
3 would go about testing your hypothesis. That's why
4 you wrote Aim No. 3. Right?

5 A. To the reader. That's for me. That's for my
6 lab.

7 Q. Your goal as a lab was to do some testing to try
8 to figure out whether there was a cause and effect
9 relationship between talcum powder use and ovarian
10 cancer. Right?

11 A. I cannot answer yes or no. I have to explain.

12 Your Honor, may I?

13 THE COURT: Go ahead.

14 A. I proposed three specific aims, not one, three
15 specific aims: Aim 1 to look at the redox balance
16 change and look at genetic mutation. Aim 2, looking
17 at inflammation; Aim 3, looking at neoplastic
18 transformation. We started one by one. We got
19 convincing evidence from Aim 1 and 2; and when we did
20 the proliferation and apoptosis, which are strong
21 indicators of cell transformation, we were happy with
22 that finding. We didn't need to do a new
23 transformation assay.

24 Q. Did you or did you not write on Aim 3 that
25 neoplastic transformation of the cells over time would

1 be critical in establishing a cause and effect
2 relationship?

3 A. I did.

4 Q. Let me turn to Aim 1. That is on page 3. It
5 states:

6 "Determine the effect of talc on the redox
7 balance on normal ovarian surface epithelial and
8 ovarian cancer cells."

9 Right?

10 A. Yes.

11 Q. Like you did for Aim No. 3, the next sentence
12 begins with:

13 "To accomplish this aim," -- a then you set
14 forth how to accomplish it. Is that fair?

15 A. Yes.

16 Q. You go on in this paragraph to discuss specific
17 tests that would accomplish the goal set out in aim
18 No. 1. Right?

19 A. Yes.

20 Q. For example, you refer to measuring the
21 "activity and expression of select oxidants and
22 antioxidants in cell culture lysate from primary
23 cultures of ovarian surface epithelial cells."

24 Did you write that?

25 A. Yes.

1 Q. You did not actually perform all of the tests
2 that are described in Aim 1; did you?

3 A. No, I did not.

4 Q. Can we agree that you did not set forth in aim
5 No. 1 that you were going to do one of the tests
6 identified, but that you may not do the others?

7 THE WITNESS: Your Honor, these are all the
8 tests that we have established in the laboratory. We
9 did six markers out of the list that we proposed to do
10 here. Do we need to do all of them? No. We don't
11 need to do all of them. From our experience, working
12 with this for the last 25 plus years, we already
13 identified and published markers that play a key role
14 in altering the redox balance. That's what we
15 reported in our manuscript.

16 Q. My question was different. My question was:
17 You did not describe in the portion of Aim No. 1 that
18 speaks about how you were going to accomplish your aim
19 that you were going to try one or maybe two or maybe
20 three of the different types of tests. You just
21 listed the things that you felt should be done in
22 order to test the hypothesis. Right?

23 A. I listed the tests that we had available in our
24 lab to go about and accomplish this aim. Does that
25 mean we have to do all the tests? The answer is no.

1 Q. And the reason you did not do all the tests was
2 money. Right?

3 A. In this case, part of it, yes.

4 Q. Let's go to Aim No. 2. That one is on page 3.

5 A. For the record, I believe, your Honor, we did
6 enough to prove the point.

7 Q. Let's go to Aim 2. Aim 2 said:

8 "Determine whether exposure to talc can induce
9 point mutations that correspond to known SNPs in key
10 oxidant and antioxidant enzymes as well as BRCA
11 one/two in normal ovarian surface epithelial and
12 ovarian cancer cells."

13 Did I read that right?

14 A. Yes.

15 Q. "SNP" refers to a single nucleotide
16 polymorphism. Right?

17 A. Yes.

18 Q. That is a mutation?

19 A. Yes. DNA.

20 Q. Sometimes referred to as a copying error?

21 A. I'm not sure about that.

22 Q. In Aim No. 2 you list a number of SNPs that you
23 say you had previously analyzed in ovarian cancer
24 cells and patient DNA. Right?

25 A. Yes.

1 Q. And so on the carry-over paragraph at the top of
2 page 4 you wrote:

3 "We have previously analyzed the following
4 SNPs in EOC cells and patient DNA."

5 And then you give a listing. Right?

6 A. Yes.

7 Q. What I want to do is I want to set out a list of
8 the various SNPs that you had previously analyzed as
9 you indicated here. Okay?

10 A. Okay.

11 Q. I'm just going to refer to them with the letters
12 that are within in parenthesis. The first is CYBA?

13 A. Yes.

14 Q. The second is MnSOD?

15 A. Yes.

16 Q. The next is NOS2.

17 Next is GPX1. Is that right, sir?

18 A. Yes.

19 Q. Next is CAT?

20 A. Yes.

21 Q. Next is MPO?

22 A. Yes.

23 Q. And, finally, GSR?

24 A. Yes.

25 Q. You identified seven different SNPs that you had

1 previously analyzed. Right?

2 A. Yes.

3 Q. And you had published findings in a
4 peer-reviewed paper concerning those SNPs; true?

5 A. Yes, some of them.

6 Q. Let me point you to one of them. You
7 co-authored in 2015 a paper entitled, "A Single
8 Nucleotide Polymorphism in Catalase is Strongly
9 Associated With Ovarian Cancer Survival." Do you
10 remember that?

11 A. Yes, I do.

12 Q. Let me have you refer in the second notebook now
13 -- it's the first time we have done that -- to Saed
14 Exhibit 502. Let me direct you to the third page of
15 that document looking at the bottom -- do you see
16 where it says three of 12 at the bottom of the page?

17 A. Yes.

18 Q. The seven selected SNPs that were reviewed by
19 you and your colleagues in this particular study are
20 shown at the top of page 3 on a chart over at the
21 left. Right?

22 A. Yes.

23 Q. And it turns out those are the seven SNPs that
24 you analyzed in connection with your work in this
25 case. Correct?

1 A. For the cell culture, yes.

2 MR. WILLIAMS: For the record, let's point
3 that out.

4 Q. The first one listed in Table 1 on that page 3
5 is CAT?

6 A. Catalase.

7 Q. CYBA is next?

8 A. Yes.

9 Q. And GPX1?

10 A. Yes.

11 Q. And GSR?

12 A. Yes.

13 Q. MnSOD?

14 A. Yes.

15 Q. MPO?

16 A. Yes.

17 Q. And NOS2. Correct?

18 A. Yes.

19 Q. Those are the same seven that you reviewed for
20 purposes of this matter. Right?

21 A. Yes, but I need to, your Honor, clarify this.

22 This study is done in patients with ovarian
23 cancer. There is no inflammation whatsoever if those
24 patients were exposed to talc powder or not. This is
25 just DNA from patients that has nothing to do -- what

1 we did here, analyzing these SNPs in cells, treated
2 with Johnson & Johnson Baby Powder, that's the big
3 difference here. I just want to note that.

4 Q. Let me ask you this: Do you remember one way or
5 the other, Dr. Saed, whether of the seven selected
6 SNPs that are listed in this study, there was an
7 association with ovarian cancer risk? Do you remember
8 one way or the other?

9 A. I remember, yes. I remember there was an MPO
10 SNP that is not the one listed here is associated with
11 ovarian cancer, yes. What I'm trying to explain here
12 is that there are more, your Honor; there are more
13 than one reported SNP on the same gene, more than one.
14 If you pick one and you don't find an effect, that
15 doesn't mean there is no association. That is very
16 clear.

17 Q. If we can go back to the abstract. In the
18 abstract, the conclusion that you reached, you and
19 your colleagues, was of the seven selected SNPs
20 studied, no association with ovarian cancer risk
21 Pearson, CHI-square was found?

22 The conclusion of this study was for the same
23 seven SNPs listed, there was no association with
24 ovarian cancer risk. Right?

25 A. Those specific SNPs with those genes -- and

1 these are patients, not cell lines exposed with talcum
2 powder.

3 Q. Yes or no?

4 A. Yes.

5 Q. Was there an association that was found between
6 the SNPs listed on the board right now and ovarian
7 cancer?

8 A. There was an association of catalase SNP with
9 survival of patients with ovarian cancer.

10 Q. Let's go back and read the next sentence. It
11 says:

12 "However, a catalase SNP was identified as a
13 predictor of ovarian cancer survival by the Cox
14 Regression Model." Did I read that right?

15 A. That's what I just said.

16 Q. What that is saying, if someone already had
17 ovarian cancer, there was an association with one of
18 the SNPs with ovarian cancer survival. Right?

19 A. Not necessarily.

20 Q. Well, is it true or not true that the seven SNPs
21 that you and your colleagues studied found no
22 association with ovarian cancer risk as indicated in
23 the abstract?

24 A. Yes.

25 Q. That was true?

1 A. Yes. But I have to say something else.

2 Q. There is no question pending. You will get a
3 chance with other counsel. Thank you.

4 Do you remember, Dr. Saed, when we were
5 talking about Aim No. 2 of your proposal, you had
6 stated that you were going to look at certain key
7 oxidant and antioxidant enzymes as well as BRCA 1 and
8 2? Do you remember that?

9 A. Yes, I do.

10 Q. BRCA 1 and 2 are human tumor suppressor genes.
11 Right?

12 A. Yes.

13 Q. It is well known that mutations to the BRCA 1
14 and 2 genes can result in an increased risk of ovarian
15 cancer. Right?

16 A. Yes. Associated with. That's different.

17 Q. That is why in your Aim No. 2 you proposed to
18 analyze SNPs for BRCA 1 and 2. Right?

19 A. When I did this, I wanted to do the ones that
20 are relevant to redox balance. After we run the one
21 with redox balance, if the data shows there is a need
22 for us to differentiate or study if there is a
23 differential effect between patients with BRCA 1
24 mutation positive or negative. That's the idea why I
25 put it there. I didn't necessarily want to do them.

1 I wanted to do them if and when I collect enough data
2 to try to segregate and see if the response that we
3 see the association response is linked to patients
4 with BRCA 1 positive versus BRCA 1 negative.

5 Q. In your Aim No. 2, did you say anything like
6 what you just said was your intention?

7 A. No.

8 Q. Let's look at Aim No. 2. B 25 is the exhibit.
9 And if we could pull up page 4. What you wrote was:

10 "Due to the known strong association between
11 BRCA 1 and 2 and ovarian cancer, we propose to analyze
12 the following SNPs" -- and then you give a long list.
13 Correct?

14 A. Where did you get this from?

15 Q. It is up on your monitor about seven lines down.
16 What you wrote in your proposal -- that's what you
17 wrote. Right?

18 A. Yes.

19 Q. And you didn't write anything about how you were
20 going to do the tests on the other SNPs, and you had
21 only gone into BRCA 1 and BRCA 2 if something
22 happened. None of that is in here. Right?

23 A. I don't have to write it in here. This is a
24 proposal for me, for my lab.

25 Q. For the record, so it is clear, at the time you

1 wrote your proposal, you knew there was an association
2 between BRCA 1 and BRCA 2 and ovarian cancer. Right?

3 A. Yes.

4 Q. You had done research yourself concerning the
5 seven SNPs that were listed on the board a moment ago
6 and had come to a conclusion with your colleagues that
7 there was no association between those SNPs and
8 ovarian cancer. Right?

9 A. Not right. Completely not right -- I mean,
10 partially not right. I'm sorry.

11 I'm surprised, your Honor, how you pick one --

12 THE COURT: Don't give your view of that.

13 A. There is another study that linked these same
14 SNPs to chemo-resistant ovarian cancer.

15 Q. What you're saying now is, there was a study
16 that analyzed the seven SNPs that showed no
17 association with ovarian cancer and another one that
18 found association with ovarian cancer. Is that what
19 you are saying?

20 A. No. What I'm saying is these studies are
21 performed in DNA from patients. The other studies
22 that we did were DNA from ovarian cancer cells
23 developed to become chemo-resistant to chemotherapy.
24 When we developed them, we derived them, we made them
25 resistant to chemotherapy. They acquired these SNPs

1 in the key enzymes and they correlated with
2 chemo-resistance. That we published previously.

3 Q. Are you saying the conclusions that were drawn
4 in your 2015 study that we had up on the board a
5 moment ago have been disproven?

6 A. How? What study? They are different studies.
7 You cannot compare. This is DNA from patients and
8 these are specific in vitro studies with cells. I
9 don't know how you can compare that.

10 Q. Are you stating that the 2015 study that you and
11 your colleagues corrected concerning the seven SNPs we
12 had up on the board where one of the conclusions
13 reached was there was no association between those
14 seven SNPs and ovarian cancer, are you now saying that
15 conclusion has been disproven since 2015?

16 A. No.

17 Q. Let me change subjects and ask you about your
18 manuscripts quickly.

19 You submitted your manuscript to a journal
20 called Reproductive Sciences in January of 2019. Do
21 you remember that?

22 A. Yes.

23 Q. You spent approximately 60 to 70 hours preparing
24 that manuscript. True?

25 A. Yes.

1 Q. You billed your time spent preparing the
2 manuscript to the plaintiffs' lawyers at Beasley
3 Allen. Correct?

4 A. Yes.

5 Q. You charged plaintiffs' counsel \$600 an hour for
6 your work on this matter. Right?

7 A. The manuscript and the expert report, yes.

8 Q. You did not tell the Journal of Reproductive
9 Sciences when you originally submitted to them that
10 the lawyers had paid you by the hour to write the
11 manuscript that you submitted. Correct?

12 A. I didn't need to.

13 Q. How many other papers listed on your CV did the
14 lawyers pay for your time to write?

15 A. Zero.

16 Q. Did the plaintiffs' lawyers receive the
17 manuscript before you submitted it to the Journal of
18 Reproductive Sciences?

19 A. No.

20 Q. Now, unlike your expert report in this case, the
21 manuscript that you submitted for publication, the
22 peer-reviewed article for the Journal of Reproductive
23 Sciences does not say that talc can cause ovarian
24 cancer. Correct?

25 A. In what manuscript? The Reproductive Science

1 one?

2 Q. Correct.

3 A. What does it say?

4 Q. I'm asking you this question: In the report you
5 set forth for Her Honor in this case --

6 A. Yes.

7 Q. -- you rendered the opinion talc can cause
8 ovarian cancer, correct? You say it flat out. True?

9 A. Yes.

10 Q. In the manuscript that you wrote and submitted
11 to the Journal of Reproductive Sciences, you did not
12 come flat out and say talc can cause ovarian cancer;
13 did you?

14 A. Yes. In the manuscript, your Honor, you provide
15 a conclusion, not an opinion. In the report, I
16 provided a conclusion and an opinion.

17 Q. Is it your testimony that scientists, when they
18 submit studies, never will set forth an opinion on
19 causation?

20 A. Yes, sometimes they do.

21 Q. You did not set forth an opinion on causation
22 for the Journal of Reproductive Sciences; true or not
23 true?

24 A. I have to remember the exact words that I said
25 in the manuscript. I can't remember. I have to read

1 the language, your Honor, that I said.

2 Q. Let me refer you to your testimony. This is on
3 page 244.

4 MR. WILLIAMS: It is tab 1, your Honor, in the
5 red binder, page 244, line 18, through 245, line 12.

6 Q. You were asked the following questions and gave
7 the following answers:

8 "QUESTION: Even in your manuscript you don't
9 include the opinion that talcum powder use causes
10 ovarian cancer. Correct?

11 "ANSWER: You cannot include opinions in
12 manuscripts.

13 "QUESTION: That's not my question. My
14 question is that your manuscript does not include your
15 opinion that talcum powder use causes ovarian cancer.
16 Correct?

17 "ANSWER: I answered you."

18 So let me ask you this: Did you or did you
19 not provide a conclusion in the manuscript that you
20 provided to the Journal of Reproductive Sciences that
21 talc can cause ovarian cancer?

22 A. I did provide a conclusion that based on my data
23 there will be an increased risk of developing ovarian
24 cancer, yes. I did not provide an opinion.

25 Q. It will speak for itself.

1 The Journal of Reproductive Sciences was not
2 the first journal to receive your manuscript. Right?

3 A. Yes.

4 Q. The first choice or the first journal that you
5 submitted it to was Gynecologic Oncology. Right?

6 A. Yes.

7 Q. I want to ask you about the response you
8 received. You were asked about this on DIRECT
9 EXAMINATION. Let me direct you to B-23, page 3.

10 I want to direct your attention to the
11 important limitations that were set forth there by
12 Reviewer No. 1.

13 The first limitation reads:

14 "The significance of the study would be
15 greatly enhanced if the mouse model corroborated the
16 cell line findings."

17 A. Yes.

18 Q. That's an in vivo study?

19 A. Right.

20 Q. The next sentence indicates the expert believes
21 your cell line studies were not convincing,
22 sufficiently convincing.

23 Do you see that?

24 A. Yes.

25 Q. The third limitation, "The first bulleted

1 highlight says, oxidative stress is a key mechanism to
2 the initiation and progression of ovarian cancer is
3 not supported by this investigation and should be
4 omitted."

5 Do you see that?

6 A. I do.

7 Q. Now, you said earlier today that you had
8 previously submitted a paper that had language not
9 exactly like that but to that effect. Do you remember
10 that?

11 A. The review article?

12 Q. The review article. Right?

13 A. Yes.

14 Q. Now, you understood when the reviewer was
15 reviewing your manuscript for Gynecologic Oncology the
16 reviewer was not talking about another paper. Right?

17 A. Yes.

18 Q. The reviewer was talking about your paper we are
19 discussing here. Correct?

20 A. Correct.

21 Q. And it was this paper the reviewer was saying
22 did not support that conclusion. True? Did you
23 understand that to be what they were saying?

24 A. Yes, I understand, but may I --

25 Q. Did you understand at the time the reviewer

1 responded that he or she was saying this paper does
2 not support that proposition?

3 A. Yes.

4 Q. Can you name any study that concludes that
5 oxidative stress actually causes ovarian cancer?

6 A. In vitro studies?

7 Q. Yes.

8 A. We have published several in vitro studies
9 showing that alteration oxidative stress -- and we
10 have identified actually a mechanism by which
11 alteration oxidative stress shut down apoptosis.

12 Q. Let me ask you this: Do you equate association
13 on the one hand with causation on the other? Are
14 those two concepts one and the same to you?

15 A. Association is different than causation.

16 Q. One shows correlation and the other shows actual
17 cause. Is that a simple way of looking at it?

18 A. Yes.

19 Q. The studies that you were referring to a moment
20 ago that you and others have done, those are studies
21 that show some sort of an association between
22 oxidative stress and ovarian cancer, but they don't
23 say that when you have oxidative stress cancer will be
24 caused. Did I get that right?

25 A. Not in all of them. Some studies say there is a

1 strong association between oxidative stress and
2 ovarian cancer. But I want to say association studies
3 in the lab, we don't do association studies. We do
4 mechanism. There are several mechanistic papers
5 showing these markers of oxidative stress upon
6 exposure to talcum powder actually changed and mimics
7 the one that you see in ovarian cancer. And we had
8 established a strong link not only with the oxidative
9 stress but also for the uncontrolled cell division and
10 shutdown of programmed cell death.

11 Q. I'm talking about oxidative stress. I would
12 like to keep that focus, if I may?

13 My question to you now is: Is the notion that
14 oxidative stress causes ovarian cancer generally
15 accepted in the scientific community?

16 A. The exact notion like that, it says it plays a
17 role in causation of ovarian cancer, yes.

18 Q. And the reason that you made the distinction you
19 just did is it is one thing to say there are
20 circumstances where we note oxidative stress and it is
21 quite another thing to say that when we see oxidative
22 stress, cancer will be caused. Those are two very
23 different things. Right?

24 A. Oxidative stress alteration in the format that
25 we described has been observed in ovarian cancer

1 patients. So it is there published by us and others.

2 MR. WILLIAMS: Your Honor, is this a good time
3 to take our afternoon break?

4 THE COURT: Sure. That will be fine.

5 THE DEPUTY CLERK: All rise.

6 (Recess.)

7 (Continued on the next page.)

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1 THE DEPUTY CLERK: All rise.

2 THE COURT: Thank you.

3

4 **GHASSAN SAED**, resumed.

5

6 CROSS-EXAMINATION (continued)

7 BY MR. WILLIAMS:

8 Q. Dr. Saed, there was some discussion today about
9 CA-125 levels. Do you recall that?

10 A. Yes.

11 Q. You say in your report that CA-125 is a
12 clinically relevant biomarker, and that's in your
13 report at C 17, page 22. Do you recall writing that?

14 A. Yes.

15 Q. You are not an expert in CA-125 or its clinical
16 utility. Correct?

17 A. Yes, I'm not an OB GYN/oncologist.

18 Q. You don't know whether CA-125 is used to
19 diagnosis ovarian cancer. Right?

20 A. What I know about CA-125, it is used to follow
21 the treatment, how effective the treatment for the
22 patient. That's all.

23 Q. That's not my question. My question is whether
24 you know one way or the other whether CA-125 is used
25 to diagnose ovarian cancer?

1 A. It is not used to diagnose typically.

2 Q. You know of no studies showing an association
3 between elevated CA-125 levels and an increased risk
4 of ovarian cancer?

5 A. Yes.

6 Q. My question, is that accurate. Do you know of
7 such studies?

8 A. Say it again, please.

9 Q. You know of no studies showing an association
10 between elevated CA-125 levels and an increased risk
11 of ovarian cancer; do you? You know of no such
12 studies?

13 A. I know that CA-125 is used in some cases as a
14 biomarker for ovarian cancer, especially for the
15 patient --

16 THE COURT: He asked about studies. Do you
17 know of any studies showing an association between
18 elevated CA-125 levels and an increased risk of
19 ovarian cancer? Do you know of such studies?

20 THE WITNESS: No.

21 Q. You would need to defer to a gynecological
22 oncologist for that. Correct?

23 A. Yes.

24 Q. Can we agree, Doctor, that CA-125 is not
25 specific to ovarian cancer?

1 A. To ovarian cancer what?

2 Q. I'll put it this way: You don't know whether
3 CA-125 levels can be elevated during menstruation; do
4 you?

5 A. I know CA-125 is elevated in fibroids, in
6 endometriosis, some pregnancies, also.

7 Q. It is not unique to ovarian cancer. Right?

8 A. Yes.

9 Q. Let me ask you some questions about dose.

10 A. It's unique to inflammation.

11 Q. Let me ask you about dose. Is it true you
12 cannot cite any data showing that the talc
13 concentrations that you used in your experiments are
14 similar to or the same level of exposure in women who
15 use talc?

16 A. Very hard to correlate the two.

17 Q. I asked you whether or not you have data showing
18 the talc concentrations in your experiments are
19 similar to the levels of exposure in women using talc?

20 A. What I said is, we don't know how much women get
21 exposed to talcum powder.

22 Q. In fact, you did not make any effort to
23 determine how the concentrations you chose for your
24 experiment compare to the level of exposure in real
25 life for women who use talcum powder; did you?

1 A. I made the efforts to make sure that the doses I
2 have used to treat my cells are not toxic and the
3 cells are happy when they are there. They have all
4 the functions.

5 Q. That's not my question. My question is, sir,
6 you did not make any effort to determine how the
7 concentrations that you did choose compare to the
8 level of exposure in real life for women who use
9 talcum powder. You didn't do that; right?

10 A. It's not known the dose that women are exposed
11 to in real life, it's not known to me.

12 Q. And what you did if you saw there were some
13 other studies that used certain doses, and you rattled
14 those off earlier -- you remember 20 and 5 and 20 and
15 so on that you used, right? You used that because
16 other studies had used them. Right?

17 A. I started higher, and I tapered it down, and I
18 looked at others, and we found that they are within
19 the same range that I am using.

20 Q. Actually, that's not quite what you did; is it,
21 sir. You actually started with 1,000 micrograms per
22 milliliter, and that killed the cells; true?

23 A. It kills some of the cells, yes.

24 Q. And you went from 1,000 to zero, five, 20.
25 That's what you did. Right?

1 A. No. I went from 1,000 to 500, and 200, and then
2 I chose those doses.

3 Q. In the end, the doses that you used were the
4 doses used by others. Right?

5 A. Yes.

6 Q. As you sit here, though, you don't know whether
7 the doses that you used, whether the talc
8 concentrations that you used compare to actual human
9 exposure in women using talcum powder. Correct?

10 A. Correct.

11 Q. A few questions on controls.

12 You created a solution of talc called DMSO and
13 you described that for the Court this morning. Right?

14 A. Yes.

15 Q. DMSO is a liquid that can dissolve other
16 substances. Correct?

17 A. Yes.

18 Q. You used sterile DMSO without talc as a control?

19 A. Yes.

20 Q. And the reason you used the DMSO solvent by
21 itself was to test for a response in cells that were
22 not treated with talc. Right?

23 A. No. We compared cells that were treated with
24 DMSO alone; DMSO with talc. We're comparing the two.

25 Q. Your reasoning was if DMSO had an effect on the

1 cells, you would see a response in cells that were not
2 treated with talc?

3 A. If there is an effect, yes. You control for
4 that effect. That's what a control is for.

5 Q. You used a centrifuge to separate the talc that
6 was mixed with the DMSO into two phases, a liquid
7 soluble phase on top and talc particles on the bottom.
8 Right?

9 A. Yes.

10 Q. Ideally, the liquid soluble phase on the top
11 should be DMSO only with no talc, right, in an ideal
12 world?

13 A. There is a solubility of talc in DMSO.

14 Q. And that liquid phase overlying the talc
15 deposited at the bottom is called supernatant. Is
16 that what that is called?

17 A. Yes.

18 Q. You tested the supernatant to see if there was
19 an effect even without the presence of talc particles.
20 Right?

21 A. What I'm trying to say, there is a solubility of
22 particles of talc in DMSO at the level of .1-microgram
23 to million; and that is already published. So there
24 is solubility in there, yes.

25 Q. When you tested the supernatant to see if there

1 was an effect by the supernatant even without the
2 presence of the talc particles, you found an effect.
3 Right?

4 A. That's what I'm saying.

5 Your Honor, this DMSO dissolved talc; some
6 talc is dissolved in DMSO. That's my answer. To the
7 effect we are seeing, you cannot separate the
8 supernatant or the talcum powder.

9 Q. What you are saying to Her Honor is you believe
10 the reason you saw an effect was because you could not
11 fully isolate the talc particles from the supernatant.
12 Is that what you are saying?

13 A. No. I'm saying some talc may dissolve in the
14 DMSO solution and be in the supernatant. That's what
15 I'm saying. So the effect could not be isolated if
16 it's talc or DMSO in the supernatant. That's why we
17 combined them.

18 Q. Did you do anything to confirm that hypothesis?

19 A. We combined them and tested the DMSO alone to
20 compare. I'm not interested to see which part of the
21 particle is doing the affect. I'm interested to see
22 the whole preparation in DMSO -- the whole preparation
23 means Johnson & Johnson Baby Powder in DMSO versus
24 DSMO alone. That's my interest. Further studies may
25 be done to fractionate to see which part does what.

1 That's a different study.

2 Q. A negative control group is often one in which
3 you would expect to see no response. Right?

4 A. Control group, if that's why you have a control
5 group, if there is a response, you can correct for it.
6 That's the idea.

7 Q. My question is about a negative control group, a
8 benign substance.

9 A. Okay.

10 Q. You are testing to see whether a substance
11 causes a harm. And you also, as a negative control
12 test something known not to cause harm. Are you
13 familiar with that concept?

14 A. Yes.

15 Q. One example of a negative control would be if
16 you exposed the cell line to an inert substance like
17 cornstarch. Right?

18 A. I don't know if cornstarch is an inert
19 substance. I never tested it.

20 Q. And you did not test cornstarch here?

21 A. I did not test it.

22 Q. Let me ask you about doing work in triplicate,
23 replicability of your work.

24 Earlier you discussed the proposal you sent to
25 the plaintiffs' lawyers. You recall that. Right?

1 A. Yes.

2 Q. The proposal that you sent to the plaintiffs'
3 lawyers said: "All experiments will be performed in
4 triplicate." True?

5 A. True.

6 Q. The manuscript that you submitted to the
7 Reproductive Sciences also says, "Experiments were
8 performed in triplicate," does it not?

9 A. It does.

10 Q. Now, your expert report does not say that your
11 experiments were performed in triplicate?

12 A. I don't know. I can't remember.

13 Q. I'll make that representation to you.

14 Did you in fact perform the experiments
15 described in your report three times for the same type
16 sample, for the identical sample?

17 A. I need to answer this, your Honor.

18 My understanding to experiments is that I'm
19 referring to assays, and all the assays are done in
20 triplicate. Let's agree on that first. All the
21 assays for the study was done in triplicate.

22 Now, let's go -- which I understood from your
23 question, are you referring to the assays to the
24 experiments or how many cell lines? I just want to
25 clarify that.

1 All of the assays are done in triplicate, and
2 this is very clear in the lab notebook.

3 Q. What do you mean by "in triplicate"?

4 A. Three times.

5 Q. So what you are testifying to is that each one
6 of the cells was put into a petri dish and tested
7 three different times?

8 A. No. What I'm saying is -- that's why we are
9 mixing up stuff. Assays, like realtime, PCR, like
10 ELISA, like proliferation, all the assays I described
11 in my studies, they all are done in triplicate. What
12 I understood from your question, and correct me, the
13 point that was raised earlier, that traditionally to
14 do triplicates you have to take one cell line, and the
15 same cell line split it into three different dishes
16 and do the experiments.

17 Q. Did you do that?

18 A. I have done that in the past but not for this
19 study. For this study I have done what I believe, and
20 I published with it several times, that even more
21 powerful six times, not three times. We did it six
22 times, six repeated different times. We did it with
23 cell one. We got results. We did it with cell two.
24 We got similar results. We did it with a different
25 cell No. 3. We got the same results. Similar results

1 were four, five and six. So six different cell lines,
2 repeated six different times. We got it similar. In
3 my opinion, this is more powerful than showing the
4 effect on one single cell line.

5 Q. So we're clear. Each cell line individually was
6 not done three times?

7 A. Correct.

8 Q. You are relying upon the idea that it is
9 powerful to have six different cell lines tested?

10 A. Yes.

11 Q. You have done studies, experiments in triplicate
12 using what we'll call Version 1, or what you called
13 this morning Version 1. True?

14 A. True.

15 Q. You did not do that here?

16 A. I did more here.

17 Q. You did not do Version 1 you talked about this
18 morning?

19 A. No.

20 Q. Earlier we discussed the manuscript that you
21 submitted to the Journal of Gynecologic Oncology. The
22 manuscript you submitted to that journal reported that
23 you treated the cell lines that you were experimenting
24 on with talc for 48 hours. True?

25 A. The GYN Oncology?

1 Q. Yes.

2 A. Yes.

3 Q. This is Exhibit A 38. It is page 15. It is the
4 first full paragraph, lines 115 through 116. And
5 there it says that the cells were treated 24 hours
6 later with 100 micrograms per milliliter of talc for
7 48 hours. Right?

8 A. Yes.

9 Q. We also discussed comments submitted by the two
10 experts who reviewed your transcript. I would like to
11 look at those again.

12 Let's pull out Exhibit B 23. That's in the
13 first notebook you have; and if you would turn to page
14 4. You see on page 3 the comments from Reviewer No. 2
15 are described, and they carry over to page 4. Do you
16 see that?

17 A. Yes.

18 Q. As it carries over to page 4. It says:

19 "The fact that SNPs were changed following
20 such short exposure to talcum is surprising and makes
21 one wonder what the biological effect of such changes
22 might be."

23 Did I read that right?

24 A. Yes.

25 Q. The Journal of Gynecologic Oncology sent its

1 rejection letter to you on September 19th of 2018.

2 Right?

3 A. Yes.

4 Q. Now, after that, on January 3rd of 2019, you
5 submitted a revised version of your manuscript to the
6 Journal of Reproductive Sciences which ultimately
7 accepted it for publication. Right?

8 A. Yes.

9 Q. Your revised manuscript changed the time from 48
10 to 72 hours. True?

11 A. Yes.

12 Q. And that, for the record, is Exhibit B 14, page
13 7, the first full paragraph.

14 Now, in between your submissions to the two
15 journals you did not rerun the experiments to increase
16 the length of talc exposure from 48 to 72 hours.
17 Right?

18 A. Yes.

19 Q. You did not do that. Right?

20 A. I did not.

21 Q. Your expert report in this matter says that you
22 exposed the cells to talc for 48 hours. Right?

23 A. Yes.

24 Q. And we've got that on the board, and that is,
25 for the record, Exhibit C 17, page 16, the first full

1 paragraph.

2 Do you recognize that from your report?

3 A. Yes. My manuscript that I submitted to GYN
4 Oncology was based on my expert report and both have
5 this error in them.

6 In the lab notebook, your Honor, I can show
7 you at the page where it clearly describes the
8 experiments, the cell type, how many hours, the
9 details for all the experiments.

10 Q. We'll get to that.

11 A. I'm just trying to tell you the report was used
12 for my manuscript. That's why it carried over.

13 Q. The report was used for the manuscript?

14 A. I used part of the manuscript for the report.

15 THE COURT: Which is it? Which was it?

16 THE WITNESS: I think the report first and the
17 manuscript second.

18 Q. The reference to 48 hours in your report was a
19 typo?

20 A. Yes.

21 Q. Was the reference to 48 hours in the original
22 manuscript submitted to Gynecologic Oncology also a
23 typo?

24 A. Yes.

25 Q. Was that reference to 48 hours everywhere where

1 it was reported?

2 A. Not everywhere. In the last section where we
3 did the studies with Johnson & Johnson Baby Powder the
4 last part of the lab notebook, all that study was done
5 for 72 hours with zero, five, 20, 100 micrograms per
6 mill. All examples are coded. They have an ID
7 number. They are all in the computer and have the
8 time we did the study for.

9 Q. Anytime in any writing that you did that it says
10 48 hours, that was a typo?

11 A. In the initial experiment in the exposure we did
12 24, 48 and 72 hours, yes, we did. I cannot say I
13 agree to your sentence because in the first initial
14 abstract that we submitted we did 24 hours, 48 hours
15 and 72 hours. I cannot remember exactly where is that
16 but we did more time points.

17 Q. It's a simple question. Right now we are
18 looking at your report. It's Exhibit C 17, and it
19 says that the cell lines were treated 24 hours with
20 different amounts for 48 hours. Correct?

21 A. Correct.

22 Q. My question is simply that, if we read a report
23 of yours or a submission of yours that uses 48 hours
24 as opposed to 72, is that an error?

25 A. In this report it is an error. In GYN Oncology

1 manuscript it's an error.

2 Q. Is there anywhere where it says 48 hours that it
3 is not an error?

4 A. I think in the initial abstract that we
5 submitted. I'm not sure. I forgot.

6 Q. You submitted an abstract to the Society For
7 Gynecologic Oncology. Right?

8 A. Yes.

9 Q. The abstract you submitted also refers to
10 testing for 48 hours. Right?

11 A. When was the date of this abstract? The very
12 initial work, your Honor, we did it for 48 hours.

13 THE COURT: I didn't get your testimony.

14 THE WITNESS: The very initial work that we
15 did, part 1 and part 2 of the lab notebook, that was
16 done with different time points. But the one in the
17 manuscript, it's only done in 72 hours, and that's
18 clearly indicated in the lab notebook.

19 Q. Let me refer you to your testimony. Tab 1, page
20 316, lines 3 through 12. You were asked the following
21 question and gave the following answers:

22 "QUESTION: I'm showing you what I'm marking
23 as Exhibit 19. Do you recognize Exhibit 19?

24 "ANSWER: It looks like the abstract we
25 submitted to SGO.

1 "QUESTION: This abstract in the middle refers
2 to testing done at 48 hours. Is that correct?

3 "ANSWER: 48 hours is a typo everywhere you
4 see it. I acknowledge that."

5 Did I read that right?

6 A. Yes, I was referring to the report and the
7 manuscript.

8 Q. You were referring to --

9 A. The report and the manuscript, and I have to
10 check the abstract, the very first one that we
11 submitted. I can't remember if it is 48 or 72.

12 THE COURT: It says 48. He wants to know if
13 it was a typo. But in your testimony you said it was
14 accurate, because early on you only did it in 48.

15 MR. LAPINSKI: Your Honor, if I can object for
16 a second because counsel now is referring to an SGO
17 publication at the end of 2018, and asking about 48
18 hours in the initial studies that he did that were
19 published prior to that, and I want the record to be
20 clear as to the abstracts that are being referred to
21 and where they might have been 48 hours and where they
22 might have been 72 hours.

23 THE WITNESS: Your Honor, the very first
24 report that we did was 48 hours.

25 THE COURT: Where is that?

1 THE WITNESS: At the Gynecology Oncology
2 abstract. I'm talking about the 48 hours being an
3 error. I'm talking exclusively only in the report and
4 the manuscript specifically -- the manuscript that we
5 did submit for GYN Oncology. When I reviewed the
6 manuscript for the accuracy of the time, I checked
7 exactly the time and the description and everything
8 was there.

9 THE COURT: You did that after you got the
10 criticism?

11 THE WITNESS: After the paper was rejected
12 from GYN Oncology, we submitted the work to
13 Reproductive Sciences; and when we submitted the work
14 to Reproductive Sciences, it attracted my attention
15 that we did a mistake there.

16 THE COURT: You went back and looked at it
17 after it was highlighted for you in the criticism?

18 THE WITNESS: Right.

19 Q. As recently as the SGO meeting that took place
20 in Honolulu a couple of months ago, that the same
21 reference to 48 hours was made?

22 A. The one in Honolulu is the SNP study --

23 Q. It is Exhibit Saed 505. It would be in the
24 second binder to your right.

25 MR. WILLIAMS: Your Honor, I'm asking him to

1 look at what I want him to look at.

2 THE COURT: Please follow the question. Not
3 your lab book. It's Exhibit 505.

4 A. I want to look at the original lab notebook.

5 Q. I'm asking you about the abstract.

6 A. I see it in front of me.

7 Q. This is the abstract presented at this 50th
8 annual meeting of the SGO that happened in March?

9 A. No, that's not me.

10 Q. Why do you say it's the wrong manuscript?

11 A. I'm not the author here. That's not my work.

12 Q. You were not a participant in any of this work
13 here?

14 A. Where? Oh, now, no, this is different. There
15 was a different one.

16 Q. It's from the same summary. The top of the
17 page -- of page 1 was just for the date. But my
18 question is whether or not you listed here in the 12,
19 16 poster session where your name appears there, that
20 the cell lines were treated with talc for 48 hours?

21 A. It says that there, yes.

22 MR. LAPINSKI: Can we have the page identified
23 that this highlight is coming from so we could follow
24 along?

25 MR. WILLIAMS: Page 94. That's where this is

1 from, your Honor.

2 Q. Where this says 48 hours a couple of months ago
3 that was a typo as well?

4 A. This is the SNP studies.

5 Q. Is that a typo as well?

6 A. To answer you, I have to go and look at the
7 manuscript, what it says in the manuscript.

8 Q. In the manuscript or your lab book?

9 A. The Reproductive Sciences manuscript. I don't
10 have a copy here.

11 Q. As you sit here today, you don't know one way or
12 the other whether you tested for 48 or 72 hours for
13 the SNPs?

14 A. I don't know. If you let me look. I can't
15 remember. I need to look at my manuscript. That's
16 all I'm saying.

17 Q. Counsel may find it for you and ask you about it
18 on redirect.

19 You wrote 48 hours in your original manuscript
20 in the Journal of Gynecologic Oncology in August of
21 2018. Correct?

22 A. The abstract, yes.

23 Q. You wrote 48 hours in your expert report.
24 Right?

25 A. Yes.

1 Q. You wrote 48 hours in your abstract to the SGO?

2 A. For the SNP studies, yes.

3 Q. You wrote 48 hours in a poster presentation as
4 well?

5 MR. LAPINSKI: Can we identify the poster
6 presentation.

7 MR. WILLIAMS: It's the one we just had from
8 the SGO meeting in Honolulu, Exhibit 505.

9 MR. LAPINSKI: Can we see the poster
10 presentation.

11 Q. Now, you testified your lab books reference
12 72 hours as the amount of time the talc was tested.
13 Right?

14 A. Yes.

15 Q. Can you cite any other substances that have ever
16 been reported to cause DNA mutations after 72 hours of
17 treatment in cell cultures?

18 A. Yes.

19 Q. What is that?

20 A. I can't remember off the top of my head but
21 there are many. We get mutations every day.

22 Q. As you sit here now, you can't remember any?

23 A. What I'm saying, I don't remember a particular
24 one but there are many --

25 THE COURT: Think of one. You don't need to

1 give me many.

2 THE WITNESS: Like, for example, smoking is
3 linked to a signature of genetic mutations. Radiation
4 is linked to a signature of mutations. I don't know
5 how soon that will come up, but I know some studies
6 that were major and they found mutations in 72 hours.

7 Q. Do you remember being asked at your deposition
8 whether you can cite any other substance that has ever
9 been reported to cause DNA mutations after only
10 72 hours of treatment, and you could not recall that.
11 Do you remember being asked that?

12 A. Yes.

13 Q. Since your deposition and up until today, have
14 you had an opportunity to think about and determine
15 whether there are in fact other substances that are
16 shown that type of mutation after 72 hours?

17 A. No.

18 Q. The smoking example that you gave a moment ago,
19 can you testify today 72 hours would be sufficient to
20 show the mutations?

21 A. No, I can't. I don't know the time.

22 Q. You mentioned a few moments ago the lab books
23 mentioned 72 hours. Do you recall that?

24 A. Yes.

25 Q. Let me ask you about your lab notebooks.

1 A. Okay.

2 Q. You prepared a lab notebook that corresponds to
3 the experiments described in your expert report.

4 Correct?

5 A. Some of it, yes.

6 Q. The entries in the lab notebook start in October
7 of 2017, and they end in October 2018. Correct?

8 A. Approximately. I'm not sure.

9 Q. Let's see what you said in your deposition.
10 Page 88, tab 1 of the red book. Lines 9 through 19 on
11 page 88 you were asked the following questions and
12 gave the following answers:

13 "QUESTION: When was this lab notebook Exhibit
14 No. 2 at the deposition prepared?

15 "ANSWER: I don't know exact dates.

16 "QUESTION: Correct?

17 "ANSWER: I don't know. I can't remember.

18 "QUESTION: Well, the date -- the dates run
19 from 10/15/17, to?

20 "ANSWER: All the way to --

21 "QUESTION: All the way to --

22 "ANSWER: October.

23 "QUESTION: October or so of 2018. So was
24 this notebook prepared over that entire period of
25 time?

1 "ANSWER: Yes."

2 Were those the questions and answers you gave?

3 A. Yes.

4 Q. Not all of the entries in your lab notebook,
5 sir, were prepared at the time the work was being
6 done. True?

7 A. Not true because we're referring, your Honor, to
8 two lab notebooks. I was asked about one of them.
9 The other one here was not in my first deposition, and
10 this is September 26, 2017. So when I went to my
11 first deposition, we had only the lab book that refers
12 to the manuscript, and this lab notebook was not
13 there.

14 Q. The lab notebook that you are holding in your
15 hand now, what is the first date and last date
16 reflected?

17 A. The first date was September 26, 2017.

18 THE COURT: What is the last date that deals
19 with this matter? We're not interested in unrelated
20 issues.

21 THE WITNESS: In this matter it deals with
22 October 2018.

23 THE COURT: Wasn't that the question he just
24 asked you, and you answered in your deposition. It is
25 no different. Is that correct?

1 THE WITNESS: Okay.

2 Q. The first date is October 2017. The last date
3 is October 2018. Right?

4 A. Okay.

5 Q. Is that true?

6 A. Yes.

7 Q. And you have the lab book in your hands as we
8 speak. Right?

9 A. Yes.

10 Q. Not all of the entries in your lab book that you
11 are holding in your hand right now were prepared at
12 the time the work was being performed. True or not
13 true?

14 A. On the same day?

15 Q. Yes, on the date reflected in the book.

16 A. Some entries are entered the same day. Others
17 might be a week later or two weeks later. Are you
18 talking about the data entry?

19 Q. Let me refer you to your testimony.

20 Page 87 of your testimony, lines 15 through
21 21, you were asked the following questions and gave
22 the following answers:

23 "QUESTION: Were all the entries in Exhibit
24 No. 2 prepared at the time that the work was done?

25 "ANSWER: No.

1 "QUESTION: When you say no, does that mean
2 that there was work done and then the -- later on
3 entries were made in the lab notebook?

4 "ANSWER: Correct."

5 Were those the questions you were asked and
6 the answers you gave?

7 A. Yes. And that's what I just said.

8 Q. There was work that was done and at some later
9 point in time entries were made in the notebook
10 describing the work. Right?

11 A. You are talking about data points?

12 Q. I'm talking about anything that appears in your
13 lab notebook, the work was done and at a later point
14 in time entries are made in the notebook describing
15 the work.

16 A. We just stick the data that we print out from
17 the computer, yes.

18 Q. Yes, the work sometimes was reflected later?

19 A. Yes.

20 Q. Some of the entries in your lab notebook were
21 made months after the fact. Is that true?

22 A. Not true.

23 Q. You were first deposed in this matter on
24 January 23rd of 2019. Do you remember that?

25 A. Around that.

1 Q. You testified portions of your lab notebook had
2 been put together four weeks prior to that deposition.
3 Do you recall saying that?

4 A. This lab notebook, yes.

5 Q. That's the same lab book that starts in October
6 of 2017 and ends in October 2018. Correct?

7 A. No. We have two lab notebooks.

8 Q. What lab notebook are you holding in your hand
9 now?

10 A. This lab notebook starts October 17th.

11 MR. LAPINSKI: Can we ask the witness which of
12 the two notebooks he is referring to?

13 THE WITNESS: This lab notebook starts
14 October 2017 and goes all the way to October 2018.

15 THE COURT: It starts on what month and what
16 year?

17 THE WITNESS: This lab notebook starts
18 October 2017 and ends October 2018.

19 THE COURT: And what is the other lab
20 notebook?

21 THE WITNESS: The other lab notebook starts
22 September 26, 2017, and ends with October 2017.

23 Q. 2017 or 2018?

24 A. 2017.

25 Q. That is a notebook that --

1 THE COURT: That is a notebook that goes for
2 one month?

3 THE WITNESS: Yes.

4 THE COURT: And the other picks up from
5 October 2017 to October 2018?

6 THE WITNESS: Correct.

7 THE COURT: I had names on the binders.

8 MR. WILLIAMS: I would handle it this way,
9 your Honor.

10 Q. You've now looked at both of your original lab
11 notebooks. Correct?

12 A. Correct.

13 Q. There is no date relating to the work you have
14 done after a date in October of 2018 in either of
15 those books. Correct?

16 A. Yes.

17 Q. One of those books has its last entry of
18 October 2017, a year earlier. Correct?

19 A. Yes.

20 Q. You testified in this case that portions of your
21 lab notebook were put together one month prior to your
22 deposition being taken in January of 2019. Do you
23 recall that?

24 A. Yes.

25 Q. Can we agree that four weeks prior to

1 January 23rd of 2019 would put us in the last week in
2 December of 2018? Can we agree on that?

3 A. No. We agree on the date but we don't agree
4 what happened.

5 Q. True or not true: There were some entries in
6 the lab notebook that has a last date of October 2018,
7 which entries were prepared and put into that book in
8 December of 2018?

9 A. The statistical analysis, yes.

10 Q. So my original question to you --

11 A. That I didn't do.

12 Q. Are you disavowing the statistical entries?

13 A. No. I'm saying these are done by statisticians.
14 It's a printout from the computer. They emailed it to
15 us. We were late in putting it in the lab notebook.

16 Q. And the statistical analysis portion is the part
17 that you are certain was actually prepared only
18 one month before your deposition was taken. Right?

19 A. Added to the lab notebook.

20 MR. LAPINSKI: Objection. That misstates his
21 testimony. He didn't testify the statistical analysis
22 was performed in December of 2018.

23 MR. WILLIAMS: If that's what I said, I
24 misspoke. I'll restate.

25 BY MR. WILLIAMS:

1 Q. The statistical analysis portion, the part that
2 was actually placed in the notebook only one month
3 before your deposition in this case was done in
4 December of 2018. Correct?

5 A. I'm not sure.

6 MR. LAPINSKI: Objection to the use of the
7 word "done" related to the statistical analysis. It
8 misstates the testimony and implies the analysis --

9 THE COURT: Let's break it apart.

10 When was the statistical analysis done and
11 placed in the notebook?

12 THE WITNESS: The statistics were done June,
13 July of 2018, and they were entered in the lab
14 notebook later in October.

15 THE COURT: I think you said something was
16 entered in December.

17 THE WITNESS: He said that. I didn't say
18 that.

19 Q. Let's look at your testimony.

20 A. In my testimony I never said anything about
21 statistical analysis.

22 THE COURT: I think it was in today's
23 testimony.

24 THE WITNESS: Not statistical analysis.

25 Q. Let's look at your testimony. Tab 1, page 88,

1 line 20 through page 89, line 3:

2 "QUESTION: It wasn't prepared, put together
3 in its entirety four weeks ago?

4 "ANSWER: Some of it was, yes.

5 "QUESTION: What portions were put together
6 4 weeks ago?"

7 MR. WILLIAMS: Your Honor, four weeks prior to
8 the deposition would be four weeks prior to
9 January 23, 2019?

10 "ANSWER: I think the one related to the last
11 portion.

12 "QUESTION: Can you point me to the pages that
13 were put together in the last month or so?

14 "ANSWER: I can't really exactly remember, but
15 the last, I would say the statistical part for sure."

16 Were those the questions you were asked and
17 the answers you gave?

18 A. Yes.

19 Q. We can agree one month prior to January 23rd of
20 this year would be late December of 2018. Correct?

21 A. Correct, but I was estimating.

22 Q. You are responsible for the book?

23 A. Yes, I am. I didn't invent data.

24 Q. You don't actually know the dates when the
25 entries in your lab notebook were put in it; do you?

1 A. I do know when we sent the data to the
2 biostatistician to run the analysis. I have the
3 emails. I have the exact date I did that, and I have
4 the exact date I received all the analysis from the
5 biostatistician. The only thing we did not do was
6 print out what the biostatistician sent me, the method
7 we used for analysis for statistics, the data for
8 statistics. I did not print it out from the computer
9 from the data he sent me electronically and include it
10 into the lab notebook.

11 THE COURT: So he is saying the statistical
12 information was placed in it in December; that is what
13 he said. The statistical analysis is what was put in
14 later. He did testify to that. I went back.

15 Q. The statistical analysis was placed in the book
16 in December, first month before your deposition. Is
17 that accurate?

18 A. When we checked later, it was October 18th, not
19 December. When I checked, your Honor, here in the lab
20 notebook, the statistical data was October 18th. I
21 was inaccurate when I said four weeks before. I was
22 estimating.

23 THE COURT: You also said it today, though. I
24 want to make sure we are clear. Are you now
25 suggesting your testimony both today and at your

1 deposition about the statistical data being put into
2 the lab book only a few weeks before your deposition
3 was an error?

4 THE WITNESS: A few weeks --

5 THE COURT: A few weeks meaning the end of
6 December?

7 THE WITNESS: It was an error, your Honor.

8 THE COURT: And now you are saying it was done
9 in October?

10 THE WITNESS: Yes, because I looked at the
11 notebook.

12 THE COURT: You don't have any independent
13 recollection?

14 THE WITNESS: From my own memory, no.

15 Q. We have been talking about the statistical
16 analysis. Let me ask you about other entries that
17 appear in your book. Okay?

18 A. Okay.

19 Q. With regard to other entries in the notebook
20 that have dates, can you tell whether those pages were
21 created on the date listed on the page or whether they
22 were created later but backdated to the date the work
23 occurred?

24 A. I will try. I don't know. I can't tell all the
25 time.

1 Q. Take a look at page 90 of your deposition. This
2 is page 90, lines 11 through 20. It's the first tab:

3 "QUESTION: With regard to the other entries
4 in the notebook that have dates, can you tell whether
5 those pages were created on the date listed on the
6 page or were they created later but backdated to the
7 date the work occurred?"

8 There is an objection.

9 "ANSWER: Yeah, so, again, we do the
10 experiment. Sometimes it takes a week or two to write
11 it in the notebook because we have the data
12 electronically, so I tell you the exact date when they
13 were put in."

14 Were those the questions and answers that you
15 gave?

16 A. Yes.

17 Q. Scientists typically do not use white-out to
18 hide information and then write over the information.
19 Correct?

20 A. Correct.

21 Q. That is not proper laboratory practice.
22 Correct?

23 A. Yes.

24 Q. Proper laboratory practice would be to draw a
25 line through whatever was there so that the original

1 data would remain intact. Correct?

2 A. We have no white-out, just for the record, in
3 any of the original data.

4 Q. Say that again?

5 A. We have no white-out in any of the original
6 data.

7 Q. When we use data in this context; that could be
8 words and not numbers. Right?

9 A. The data that we have are all electronically
10 generated. The white-outs are in the text in the
11 words that describe methodology.

12 Q. What I'm asking you is whether it is appropriate
13 when you are describing methodology to use white-out
14 and write over what's described in methodology?

15 A. I said no.

16 Q. That's not proper?

17 A. Correct.

18 Q. So whether we are talking about numbers or we
19 are talking about words describing methodology, it is
20 not proper scientific method to use white-out. Right?

21 A. If you do it in the data, there is a big
22 problem.

23 Q. Now, let's look at some of the changes that were
24 made.

25 In Exhibit B 13, page 125, which is projected

1 on the screen, you see there is an entry where there
2 is white-out, and the words Johnson & Johnson are
3 written over at the white-out. Do you see that?

4 A. Yes, I do.

5 Q. That has to do with what product is being
6 reviewed. Correct?

7 A. Yes.

8 Q. In another entry your lab notebook added the
9 name of the product tested after the time the rest of
10 the entries on the page had been entered. Do you
11 remember that? I'll refer you to page 104 of Exhibit
12 D-13. Exhibit B-13, page 104.

13 Do you have that in front of you?

14 A. Yes.

15 Q. Do you see the reference to Johnson's Baby
16 Powder with an arrow?

17 A. Yes.

18 Q. And the arrow points to the word "talc"?

19 A. Yes.

20 Q. And then on the line after that there is a
21 white-out on a number of words, and there is a
22 reference to changing the sterilization method in the
23 experiment?

24 MR. LAPINSKI: Objection. It misrepresents
25 what's on the page. There is no reference to changing

1 a sterilization method.

2 Q. Here is my question. You see there is white-out
3 used where the words appear "sterilization under UV
4 light to avoid endotoxins"? Did I read that right?

5 A. Yes.

6 Q. That's a methodology?

7 A. Yes.

8 Q. It is whited out and those words appear over it.
9 Right?

10 A. Yes.

11 Q. Look at Exhibit B-15, page 31. For this one on
12 page 31, this entry in the lab notebook used white-out
13 to remove the name of a particular cell line that was
14 used for the experiment. Is that right?

15 A. No.

16 MR. LAPINSKI: Objection, your Honor. It
17 misrepresents.

18 Q. What was whited out here?

19 A. What's whited out, I can read through it. It
20 says "cell biologic," which is the description of the
21 cell line that is underneath it. She just misplaced
22 it. That's for normal ovarian epithelial. I can see
23 through it. It says "cell biologic, Chicago,
24 Illinois."

25 Q. This entry in the lab notebook you used

1 white-out to remove the name of a particular cell
2 line?

3 MR. LAPINSKI: Objection. It misrepresents.

4 THE COURT: The document will speak for
5 itself. I got it.

6 Q. Your lab used white-out to change multiple dates
7 from multiple entries in the book. Is that a fair
8 statement?

9 A. No.

10 Q. For example, let's look at Exhibit B 15, page
11 32. Do you see the entry, 9/26/2017.

12 A. Yes.

13 Q. Do you see that is writing over original
14 information?

15 A. Yes.

16 Q. The next entry on 9/29/2017 was altered with
17 white-out. Do you see that? That's another date
18 there?

19 A. Yes.

20 MR. LAPINSKI: Your Honor, can I ask whether
21 or not the doctor has his original notebooks; and, if
22 so, he can look at his original notebooks to see what
23 is being referred to.

24 THE COURT: He's got them, I think. Are you
25 looking at your lab notebook?

1 THE WITNESS: Yes.

2 I have 9/26/2017 in here. That's different,
3 though. Give me one second, though.

4 Q. In the handwriting it would be page 3. Do you
5 have that?

6 A. I get what you are trying to say. There is a
7 change in the date with the white-out.

8 Q. There was one. Right?

9 A. Yes.

10 Q. The next one I would like you to look at is on
11 page 33 of the exhibit, if you were using the exhibit
12 in the book. I think it's on page 40, if you are
13 looking at the handwritten numbers on the bottom of
14 the page. So if you are using the original, go to
15 page 40. Do you see the entry that refers to
16 10/3/2017 with white-out?

17 A. Yes.

18 Q. That date has been altered. Correct?

19 A. I don't know if it is altered. It's just a
20 simple mistake.

21 Q. You see white-out was used. Right?

22 A. Knowing the nature of my research assistant, she
23 is always doing mistakes and white's them out.

24 Q. There is white-out on the page and handwriting
25 over it. Correct?

1 A. Correct.

2 Q. The same thing with the next date: 10/6/2017;
3 and the next one: 10/7/2017 is what appears there
4 with dates changed. Right?

5 A. Yes. I see that.

6 Q. If you turn the page, there is another one:
7 October 10, 2017, where the date is changed. Right?

8 A. Yes, I see the change.

9 MR. LAPINSKI: Your Honor, note my objection
10 when the statement is made that something is changed.
11 There is white-out there. We don't know whether or
12 not it was changed. There is just a reference to
13 white-out there.

14 THE COURT: Let's use common sense. There is
15 no reason to white something out.

16 MR. LAPINSKI: There are situations, there are
17 changes underneath the white-out. Yes, common sense
18 would say --

19 THE COURT: This is in the same place. I
20 understand the last one where he said he was moving it
21 down the line to biologic. This looks like he's
22 whiting out a date. I will employ some common sense.

23 Q. Let's talk about computational issues.

24 Earlier today, and if we could look at Exhibit
25 B 13, page 122, this was pulled up earlier today by

1 plaintiffs' counsel, and it is on page 122, and you
2 will recall there was a discussion of these entries
3 for a particular cell line, and there was an average
4 taken. Do you remember that?

5 A. Yes.

6 Q. If we could pull those out, these three numbers:
7 2.17, 2.46, 2.39, and then the average was 2.47, and I
8 was using the normalized numbers. Correct?

9 A. Yes.

10 Q. Counsel said the proper numbers to use were the
11 numbers over to the left, which have pg/u1RNA.
12 Correct?

13 A. I said that.

14 Q. Now, today you said that the computer works
15 these averages, decides what to exclude, and takes an
16 average excluding the outlier. Correct?

17 A. Correct.

18 Q. Now, you have been conducting studies of this
19 sort, I believe, you testified, for a number of years.
20 Right?

21 A. Correct.

22 Q. And you had your deposition taken in this case,
23 and you were asked the very same question about
24 whether or not these averages were accurate, and you
25 gave an answer. Do you remember that?

1 A. Yes.

2 Q. Now, when your deposition was taken and you were
3 asked about this very same set of numbers, you didn't
4 say anything about the computer doing it; did you?

5 A. No, I didn't.

6 Q. Let me ask you to look at page 313 of your
7 deposition, line 7, through 315, line 12. You were
8 asked a number of questions about this very page, and
9 bear with me:

10 "QUESTION: Why do you only average two of the
11 three numbers sometimes?

12 "ANSWER: If we have outlier really high
13 different.

14 "QUESTION: And what's your criteria for
15 throwing out an outlier?

16 "ANSWER: So if you have 4.5, 4.3 and 6.5,
17 that's an outlier.

18 "QUESTION: What's your threshold for
19 classifying something as an outlier to not include it
20 in your calculations?

21 "ANSWER: So if the two numbers match, the
22 closer they match and the higher the outlier is, is
23 what we determine."

24 There has been no reference to a computer yet.
25 Right? Can we agree on that?

1 A. Yes.

2 Q. Next question, line 16:

3 "QUESTION: Do you always throw out the
4 outlier of the three values?

5 "ANSWER: Not always, not necessarily.

6 "QUESTION: So I'm just trying to figure out
7 what's your criteria for --

8 "ANSWER: So if they are like, for example,
9 close, like, for example, here, if we don't know that
10 it is an outlier, like, for example, here, 3.6, 4.3,
11 3.2, it's very hard to determine an outlier, but if
12 you have 6 and 6 and 7, it is not hard.

13 "QUESTION: Do you have a certain numerical
14 criteria that you use to classify something as an
15 outlier that you are going to exclude from your
16 calculations?

17 "ANSWER: I just told you.

18 "QUESTION: What is the numerical value?

19 "ANSWER: I don't have a numerical value.

20 "QUESTION: You just eyeball it."

21 There is an objection.

22 "ANSWER: No, no, no, no, please. So I just
23 said, if the two numbers agree, very close, the closer
24 the two numbers together, and the more further is the
25 other number, that is considered an outlier to me.

1 "QUESTION: But, again, you don't have any
2 numerical formula that you follow to make that
3 determination. Correct?

4 "ANSWER: I told you what I follow."

5 There is still no reference to a computer.
6 Right?

7 A. My understanding to this is, I was giving
8 general explanations to an outlier. That's what I was
9 trying to do.

10 Q. My question is: There was no reference to a
11 computer there. Right?

12 A. Not here. I tried, your Honor, to explain why I
13 said that. I thought I was explaining to them, what
14 to me, my understanding what is an outlier in general.

15 Q. And as you sit here today, are you able to tell
16 the Court what the methodology is for choosing to
17 exclude some of the values?

18 For example, Her Honor pointed out the number
19 that was excluded as an outlier was actually closer to
20 the middle number than the other number with which it
21 was attached. Do you recall the Court pointed that
22 out?

23 A. Yes.

24 Q. Can you explain to the Court why that was done?

25 A. Your Honor, these are all formulas that are done

1 electronically. The formula -- you only can tell the
2 formula if you click on the column it tells you of the
3 exact formula what it is. Here it is not available.
4 I can't tell the formula. So this formula is
5 predetermined and put in the spreadsheet and the
6 spreadsheet calculated automatically. So in order to
7 see the formula, your Honor, I have to click on the
8 Excel file and look at the formula, which I can't do
9 here. So the criteria of exclusion is set by the
10 biostatistician as the number that has a significant
11 difference than the other two. That's what I just
12 said in my deposition.

13 Q. Are you saying that's what you said in your
14 deposition?

15 A. That's what I was trying to say at least. My
16 understanding, your Honor, if I can explain, this in
17 general, that's my understanding. So that's why I was
18 explaining, as I understood it, not as what is the
19 exact formula in the book.

20 Q. Let me ask you about your cell proliferation
21 analysis and apoptosis.

22 Exhibit A 39, page 9, I'm referring to the
23 bold page numbers at the bottom. There is a chart at
24 the top of page 9. It's Figure 5. You report an
25 increase in cell proliferation in response to talc

1 treatment. Correct?

2 A. Yes.

3 Q. And the normal ovarian cells are reflected by
4 the second bar there, right?

5 A. Yes.

6 Q. Cell proliferation means an increased number of
7 cells when taken into account the balance that you
8 described between cell division and cell death.

9 Right?

10 A. Yes.

11 Q. Normal cells without cancer can experience a
12 temporary increase in cell proliferation in response
13 to certain substances. True?

14 A. What's the word you threw in there?

15 Q. I said normal cells without cancer can
16 experience a temporary increase in cell proliferation
17 in response to certain substances or agents. Right?

18 A. Yes.

19 Q. In fact, temporary cell proliferation is a
20 normal response of all cells to agents like talc.

21 Correct?

22 A. I don't know that it is normal. What do you
23 describe as "normal"?

24 Q. I'm actually using your words. Do you believe,
25 according to your knowledge, that an initial induction

1 of proliferation is a normal response of all normal
2 cells to agents?

3 A. I said initial induction of inflammation.

4 Q. Let's take a look at your deposition. Page 265.

5 A. By the way, proliferation is correct also.

6 Q. Take a look at page 265, lines 10 through 17 you
7 were asked:

8 "QUESTION: But you agree cell proliferation
9 does not equate to cancer?

10 "ANSWER: Okay. I am answering you.
11 According to my knowledge, transit, transit or, let's
12 say, temporary or initial induction of proliferation,
13 it is a normal response of all normal cells to agents.
14 If this response continues now, this is a hallmark of
15 cancer. It is indication that this cell is going that
16 route."

17 Was that how you answered the question at your
18 deposition?

19 A. Yes.

20 Q. You cannot cite any studies showing an increased
21 cell proliferation in women using talc?

22 A. How do you measure cell proliferation in women?

23 Q. Are you saying it would not be possible to
24 analyze cell proliferation in women?

25 A. I'm not aware of that. You need to extract the

1 cells from women to study that. How would you do that
2 in vivo?

3 Q. Would it be possible to extract cells from women
4 to study it?

5 A. It would be after the fact of treated versus not
6 treated.

7 Q. Wouldn't it be possible to do that type of
8 analysis by extracting cells from women?

9 A. You can extract ovarian cancer cells from
10 tissues from women, yes.

11 Q. You have called cell proliferation an indirect
12 measure of a transformation to cancer cells. Correct?

13 A. Yes.

14 Q. It is not direct?

15 A. It is an indication that the cell is going in
16 this direction.

17 Q. It is an indication but it is not certain
18 whether the cell would go in that direction or not.
19 Right?

20 A. Right.

21 Q. You resorted to this indirect measure for
22 purposes of your study here because you never tested
23 for neoplastic transformations in the cells directly.
24 Correct?

25 A. For me, looking at all the profiles we have

1 seen, all the changes we have seen with Johnson &
2 Johnson Baby Powder and their effect in a
3 dose-response manner in different areas, not just
4 proliferation. We're talking about oxidative stress,
5 inflammation, CA-125, induction mutation, all of this
6 in combination with increasing proliferation in this
7 matter, prohibiting apoptosis is a very strong
8 indication the cells have gone this way, yes.

9 Q. Strong indication but not causal?

10 A. 100 percent causative. It's my opinion it will
11 cause it, yes.

12 Q. What percentage would you say it is?

13 A. I don't know. Causing this in my experience and
14 the data as I have seen, I think it is very, very
15 likely to cause cancer, yes, ovarian cancer.

16 Q. How likely?

17 A. Very likely.

18 Q. And any studies that you have published that say
19 that, that mere cell proliferation means that there is
20 a mere association is the same thing as a causal
21 connection -- let me rephrase the question.

22 We covered this earlier, but my question to
23 you is: Do you consider an association between a
24 substance and ovarian cancer to be the same thing as a
25 causal connection between a substance and ovarian

1 cancer?

2 A. Isolated incidents like that, no. But provided
3 the data that we established and we got, yes.

4 Q. Let's talk about your data. You did this MTT
5 proliferation assay. Correct?

6 A. Yes.

7 Q. Turn to Figure 5 of your Reproductive Sciences
8 article. That's Exhibit A 39.

9 A. Okay.

10 Q. I'll direct your attention to page 9, Figure 5.
11 That's the figure at the top of the page. Right?

12 A. Yes.

13 Q. Below that chart and the bar graphs there in the
14 fine print, you describe what Figure 5 is. Right?

15 A. Yes.

16 Q. In your words it shows that cell proliferation
17 is increased in response to talc treatment. Right?

18 A. Right.

19 Q. So proliferation was determined by something
20 called MTT proliferation assay. Right?

21 A. Right.

22 Q. To conduct that assay you added a reagent, a dye
23 to the cell lines that you intended to study.

24 Correct?

25 A. Yes.

1 Q. Some of the cells absorbed the reagent and some
2 did not. Correct?

3 A. Correct.

4 Q. Those cells that absorbed the reagent reduced it
5 to a dye?

6 A. Absorbed the dye.

7 Q. They absorbed the dye itself?

8 A. Yes.

9 Q. The cells that absorbed the dye are the cells
10 that are proliferating?

11 A. Viable.

12 Q. The cells that do not absorb the cells do not.
13 Right?

14 A. Yes.

15 Q. Basically, you measure cell proliferation by
16 applying a dye to the cells and seeing how much dye
17 those cells did or did not absorb?

18 A. This is a very well established technique, yes,
19 sir.

20 Q. This is what you did?

21 A. I did, yes.

22 Q. Let's take a look at how you conducted the
23 assay. Please look at Exhibit B 13, the lab notebook,
24 page 1-87.

25 There is something pasted into the lab

1 notebook, which is a chart. Right?

2 A. Yes.

3 Q. That shows the intended application of the
4 method -- that is, the MTT cell proliferation assay.
5 Right? This is how you are going to go about it?

6 A. I'm sorry. I missed that.

7 Q. This chart right here, it has at the top 96
8 wells plate design. Right?

9 A. Yes.

10 Q. This is meant to set forth the design of the --

11 A. That's the plate you insert into the machine.

12 Q. A wells plate is a physical object like a tray.
13 Right?

14 A. Yes.

15 Q. The 96 refers to the number of wells in that
16 plate. True?

17 A. Yes.

18 Q. Let me show you an example. That's what it
19 looks like?

20 A. Yes.

21 Q. That has eight rows and 12 wells across the top;
22 and 8 times 12 is why it is called a 96 wells plate.
23 Correct?

24 A. Yes.

25 Q. Each of those little circles here is a well.

1 Right?

2 A. Yes.

3 Q. Your lab notebook includes pictures depicting
4 this type of a well plate at many different places.
5 Correct?

6 A. Yes.

7 Q. Do I need to show those to you?

8 A. No. I know them.

9 Q. That's a common way of doing it?

10 A. Yes.

11 Q. These are meant to symbolize a wells plate?

12 MR. WILLIAMS: For the record, we are showing
13 pages 1-77 and 1-30; those pages have wells plate
14 examples like those on the board.

15 Q. Now, we see the rows on the left-hand side of
16 each of these images. Each of the rows is assigned a
17 letter A through H. Is that standard?

18 A. Yes.

19 Q. On the top of each plate depicted on these pages
20 we see columns numbered 1 through 12. Right?

21 A. Right.

22 Q. Now, there are handwriting markings on these
23 examples from page 1-77 and page 1-30. Right?

24 A. These are for a different assay, though.

25 Q. I understand. I'm just -- by way of example,

1 this is what it would look like when you are recording
2 the data. True?

3 A. Yes.

4 Q. Let's go back to page 1-87 and the 96 wells
5 plate design. Like the examples elsewhere in your
6 notebook, this plate designed chart shows 8 rows,
7 letters A through H. Correct?

8 A. Yes.

9 Q. And 1 through 12 across the top. Right?

10 A. Yes.

11 Q. But below 7 through 12 across the top, there is
12 just an open box because it was your intention not to
13 use all of the wells for this experiment. Correct?

14 A. No, there was a standard somewhere.

15 Q. It was a standard somewhere. What was the
16 standard?

17 A. A standard to compare how much dye you could
18 get.

19 Q. All I'm focused on is here we have different
20 cell lines depicted in the rows that go across A, B
21 through H. Correct?

22 A. Okay.

23 Q. Instead of going all the way across, this is
24 meant to show that there are not going to be wells
25 that are used, 7 through 12 for every one of those

1 types of cells. There are only going to be three.

2 Right?

3 A. I'm missing your point. I don't understand what
4 you are saying.

5 This is the design right here. I don't see
6 anything wrong with it. Ask me a question.

7 Q. In row A there is a cell line A 2780. Do you
8 see that? And that's underneath columns 1 through 3.

9 A. Untreated.

10 Q. The "UNT" refers to untreated?

11 A. Yes.

12 Q. And the B row refers to the same cell line
13 treated with talc. Right?

14 A. Right.

15 Q. And this is only for the three cells in columns
16 1, 2 and 3. Right?

17 A. Three times, yes.

18 Q. What this is depicting is that for the cell line
19 that is entitled EL-1, the experimenters are going to
20 use wells 4, 5 and 6. Correct?

21 A. 4, 5 and 6, yes.

22 Q. And row A is for the untreated; row B is for the
23 treated. Correct?

24 A. Correct.

25 Q. Now, the cell lines that are depicted here are

1 the same cell lines that we discussed -- are the same
2 cell lines that you used for all of your studies that
3 you did for this matter. Correct?

4 A. Yes.

5 Q. Is that right?

6 A. Yes.

7 Q. "UNT" is for untreated. Right?

8 A. Yes.

9 Q. And the 100 micrograms per milliliter is for
10 those being treated with talc. Correct?

11 A. Correct.

12 Q. Now, let's look at the normal ovarian cancer
13 cell line untreated. That is Row G. Correct?

14 A. Yes.

15 Q. And the normal ovarian treated is Row H?

16 A. Yes.

17 Q. There is not a 9th row here. Can we agree on
18 that? There is no Row I on this well plate design.
19 True?

20 A. Yes.

21 Q. We've talked about your 96 well plate design,
22 and the intended application of your proliferation
23 assay.

24 I want to talk to you now how you actually
25 applied it and how you applied your methodology.

1 Please turn to page 1-88 of your lab notebook,
2 Exhibit B 13. This page depicts three things: at the
3 top it has a chart where there is handwriting above it
4 that says "raw data." Correct?

5 A. Yes.

6 Q. This refers to the raw data that actually was
7 collected by you and your colleagues and analyzed in
8 conducting the MTT proliferation assay for your
9 publication Exhibit A 39. Right?

10 A. Right.

11 Q. The numbers in this chart are the raw data.
12 Right?

13 A. Right.

14 Q. There are six columns here on your raw data
15 chart. Correct?

16 A. Yes.

17 Q. And that is consistent with the wells plate
18 design that we just look at on the previous page, page
19 187. Right?

20 A. Yes.

21 Q. By "raw data," you are referring to the data
22 that you collected and analyzed. Right?

23 A. Collected. Analyzed is the next.

24 Q. Let's count together the number of rows that
25 appear here.

1 Would you agree there are nine rows here -- 1,
2 2, 3, 4, 5, 6, 7, 8, 9 rows. Do you agree?

3 A. Yes.

4 Q. Now, a 96 well plate has only eight rows. We
5 established that. Correct?

6 A. Correct.

7 Q. And if there were actually nine rows times 12,
8 that would be a 108 wells plate design. Right?

9 A. Right.

10 Q. Did you use a 108 wells plate design here?

11 A. No, I did not.

12 Q. Unlike the plate design on page 1-87, the raw
13 data does not assign a letter for each row. Correct?

14 A. Yes.

15 Q. On your cell design there is an assignment of a
16 letter for the different cells that are going to be
17 used. Correct?

18 A. Say that again, please.

19 Q. For example, "normal ovarian untreated" is row
20 G, columns 1 through 3. Right?

21 A. Yes.

22 Q. If we go to the actual raw data, can we agree
23 that there is no letter that is assigned?

24 A. Yes.

25 Q. And as per what the data records, all of these

1 numbers start with a zero. There is a decimal point,
2 and then there is a number that appears after that.

3 Right?

4 A. Yes.

5 Q. The higher number reflects higher levels of cell
6 proliferation. True? A lower number reflects a lower
7 number of critical proliferation. Right?

8 A. Yes.

9 Q. The higher the number the more proliferation.
10 True?

11 A. It is not as straight as you think. There is
12 also a correction factor. Go to the actual
13 calculation.

14 Q. Go to page 1-88 in the center of the page.

15 A. This is how the data is calculated.

16 Q. This is how it is actually reported. Right?

17 A. This is how it is calculated too.

18 Q. Am I correct that the reported data that we're
19 looking at here for each of the different cell types
20 draws its information from the raw data?

21 A. Yes.

22 Q. Without the raw data, one cannot fill out this
23 chart, which is the actual reported data from which
24 you prepared the bar chart that's at the bottom of
25 page 1-88. Right?

1 A. Yes.

2 Q. I just want to be clear. The same data that
3 appears in the middle of the page on page 1-88 is the
4 data from which -- the data that you used in preparing
5 Figure 5 of your manuscript and the article we have
6 been talking about?

7 A. Yes. There is something missing in the middle.

8 Q. Let's pull out the middle.

9 THE COURT: The folded piece of paper.

10 Q. What's on the folded piece of paper?

11 A. The graph that's established directly from the
12 data.

13 Q. Very good. Now, the first three columns of data
14 -- I wanted to go back to the middle of the page, the
15 actual reported data.

16 The first three columns of data are identified
17 by the letters OD, and the numbers 1 through 3.
18 Right?

19 A. Optical different 1 triplicate, yes.

20 Q. "OD" refers to optical different. Right?

21 A. Yes.

22 Q. I'm going to refer to this chart, the one that
23 has all the cell charts that you reviewed, and has
24 optical different from the numbers you reported on the
25 raw data as on this reported data. Is that accurate?

1 A. Okay.

2 Q. We put a slide together that has the plate
3 design, the raw data, and the reported data charts.
4 Is that okay with you? We already talked about all
5 three of these. Right?

6 A. I would rather use the middle figure in my lab
7 notebook.

8 Q. The middle figure in the lab notebook is the one
9 that's reported at the bottom here. Right?

10 A. Yes.

11 MR. LAPINSKI: Your Honor, note our objection.
12 That's not all the raw data.

13 A. That's part of the figure, yes. This is the
14 whole figure from here to here.

15 THE COURT: It has a colored graph at the end?

16 THE WITNESS: He's taking only this part, half
17 the numbers.

18 Q. If we could, let's go back to the reported data,
19 which is on page 1-88, if you would blow up the middle
20 section?

21 MR. LAPINSKI: Your Honor, just for the
22 record, on the right-hand side of that image, you
23 could see it is covered, and there is additional data
24 underneath it.

25 THE COURT: There is one last column. That's

1 correct.

2 MR. WILLIAMS: Your Honor, can I approach?

3 THE COURT: Yes.

4 BY MR. WILLIAMS:

5 Q. In the original book there is a chart that
6 appears over to the right that did not appear with the
7 copies that has talc treatment. It is in a graph. It
8 has talc treatment, 100 micrograms per millimeter on
9 the X axis, and it has cytotoxicity by percentage
10 along the Y axis.

11 Did I accurately describe what is not depicted
12 in the copy?

13 A. Yes.

14 That's just the way the copy was made.

15 Q. Is it true, sir, the optical densities hereto
16 are the data that is reported in your report?

17 A. Yes.

18 Q. For ease of reference --

19 A. For the data that is reported here -- the graph
20 that you just described that is going to present
21 percentage of cytotoxicity. Whereas, the graph of the
22 one presented in the paper, which is underneath it, is
23 percent of cell proliferation above baseline.

24 Q. Are you saying the numbers that appear in the
25 first three columns of OD 1, 2 and 3 do not get

1 factored into the figure at the bottom of the page?

2 A. They do. They are the basis of the figure.

3 These are measuring the cytotoxicity. Your Honor, we
4 have this methodology determines the number of viable
5 cells, and by default, if you have 20 percent viable,
6 there is 80 percent toxicity. This figure shows
7 percentage of cytotoxicity, the number of killed
8 cells.

9 Q. I can't hear you.

10 A. People have 100 cells, 25 percent of cells are
11 viable, 75 percent of cells would be dead. So here
12 the assay is calculating percent of toxicity, how many
13 dead cells. In our report we wanted to show how many
14 viable cells, which we used the data to extrapolate
15 how many viable cells.

16 Q. Let me focus your attention, if we could go back
17 to what we prepared with the three different pieces.
18 I just want to show where we are drawing the
19 information from. That's the point I'm trying to
20 make.

21 Let me focus your attention on the A 1 well,
22 the very first row and column. That is for the A-2780
23 untreated cells, correct, and the number drawn out
24 there is 0.1764 in what we have given row A for column
25 1. Right?

1 Finally, if you look at the bottom chart, that
2 is the number as what is set forth in the reported
3 data for optical different 1 and for A2780 untreated.
4 Is that correct? That's where the information is
5 drawn?

6 If we look at the raw data which is depicted
7 in the center of the screen, the result for the first
8 well, meaning the first row and the first column, has
9 a result of .1764. Correct?

10 A. Yes.

11 Q. And if you look at the bottom chart, the
12 reported data, the first well in the first row and
13 column under OD 1, we see that is from the very same
14 A2780 untreated cell line, and it is the same value
15 that is placed in the first column. Is that accurate?

16 A. Yes.

17 Q. All I'm trying to establish, sir, is the
18 information depicted on the reported data is drawn
19 from the raw data, the row and column that
20 corresponds. Is that accurate?

21 A. Yes. But in this case we ran an additional one,
22 an additional plate. If we don't have enough, we
23 always run an additional one.

24 Q. Now, let's look at the top table again with the
25 plate design. The amount for well is for the EL-1

1 untreated cells. Correct? See where I'm talking
2 about at the top of the screen. See that?

3 A. Yes.

4 Q. All I'm trying to say is that this is the cell
5 line that you are using, correct? Row A is untreated
6 for the EL cell line; B is the treated. Right?

7 A. Okay.

8 Q. And now let's look at the raw data that appears
9 in Row A-4. It's .1616. Do you see that in column
10 No. 4?

11 A. Yes.

12 Q. At the bottom, if we look at the EL cell line,
13 that same value point, .1616 is placed there. Is that
14 where that information came from?

15 A. Okay.

16 Q. Are you with me so far?

17 A. I'm trying.

18 Q. So you assigned cell lines to specific wells,
19 and you took the data from the raw data chart and put
20 it into the reported data chart. That's what
21 happened. Right?

22 A. I'm completely lost, sorry.

23 Q. You assigned the cell lines to a particular
24 well. This is well A-4. We just talked about that.
25 Right?

1 A. Okay.

2 Q. If we look at the raw data, A-4 there is a value
3 there, .1616. Right?

4 A. Right.

5 Q. Then at the bottom for the EL-1 untreated, that
6 same value appears. Right?

7 A. Right.

8 Q. What is supposed to happen is that this chart,
9 the cell type chart which is the reported data is
10 supposed to reflect the data that is set forth here
11 from the raw data.

12 A. Yes.

13 Q. Let's use the normal ovarian cancer line as an
14 example. The normal ovarian cancer line is supposed
15 to be row G, columns 1 through 3. Right?

16 A. Yes.

17 Q. And Row H is supposed to be the normal -- is the
18 normal ovarian treated cells. Right?

19 A. (No response.)

20 Q. I'm looking at the top of the plate design.

21 A. Yes.

22 Q. Look where I'm pointing the laser. The plate
23 design calls for Row H and wells 1 through 3 to be
24 used for the normal ovarian treated cells. Is that
25 correct?

1 A. Ask your question, please.

2 Q. I'm trying to ask you whether we have it right
3 -- whether this information that appears in Row H, the
4 8th line down, and column No. 1 is for the normal
5 ovarian untreated cells?

6 A. 0.103, 0.115 --

7 Q. It's supposed to be treated cells. I misspoke.
8 Row G is supposed to be for the normal ovarian
9 untreated cells. Right?

10 A. No.

11 Q. This is your methodology. Right? So you tell
12 me what is supposed to be in Row G, columns 1 through
13 G, are they normal ovarian cells or are they some
14 other type of cell line?

15 A. Let me see. Let me think.

16 (Pause.)

17 Q. It's a simple question.

18 A. It's not a simple question. It took you 3 hours
19 to say the question. I need to look at the data and
20 see what's happening.

21 Q. I'm not asking about the data. I'm asking about
22 the design for your experiment.

23 In the design for your experiment there is
24 supposed to be a well that is assigned for Row G,
25 columns 1 through 3 for normal ovarian untreated

1 cells. True or not true?

2 A. I see 1. I see the .103 is the untreated
3 normal, and the .225 is the treated normal. That's
4 what I see here.

5 Q. What are you looking at, sir?

6 A. I'm looking at the chart in my data here.

7 Q. Are you looking at the raw data?

8 A. In the middle, the chart in the middle with the
9 graph.

10 Q. Let's pull out the bottom on this page, if we
11 could.

12 Now, do you see here in Row G, which was
13 supposed to be for the untreated cells, there is a
14 number .1244.

15 MR. LAPINSKI: Your Honor, it's counsel that
16 put the amount through I and labeled the cells. It
17 doesn't mean Row G is supposed to be associated with
18 that.

19 BY MR. WILLIAMS:

20 Q. Well, now, let's go to the top here. Is this
21 your plate design or is it not? The top of the screen
22 which depicts what is on page 1-87 of your lab
23 notebook, which has a cutout to describe the
24 methodology for your experiment assigns certain types
25 of cell lines to certain rows and columns; does it

1 not?

2 A. To describe the sequence.

3 Q. And the sequence you are referring to is the
4 sequence for the 96 cell design; right? The actual
5 tray where the samples are placed and tested. Right?

6 A. Yes.

7 Q. G-1, 2 and 3 are for untreated. True or not
8 true?

9 A. G is for untreated, yes.

10 Q. H is for treated. Right?

11 A. Yes. That's supposed to be.

12 Q. Plaintiffs' counsel just said that we were the
13 ones who assigned these letters to the rows. Did you
14 hear that a moment ago?

15 A. Yes.

16 Q. Without our adding that, how would you be able
17 to look at this raw data without looking at your cell
18 design and figure out where the data should be placed?

19 A. I think I can answer that. As you said, this is
20 not an eight well. This is nine, first of all. I
21 think the last one, the H is referred to the blank
22 that we used for that plate --

23 Q. H is referring to?

24 A. A blank. And then there is another plate ran
25 that we put the data in here for the I, the raw data,

1 transferred it to there, if I remember correctly.

2 Q. Could you point the Court to your lab notebook
3 describing what you just said?

4 A. Yes.

5 Q. Tell us the page.

6 A. As you just said, the 96 well plate will go
7 eight rows vertical and nine rows horizontal. Eight
8 times 12 is 96. Here we have nine additional ones.

9 Q. You have nine what?

10 A. Nine vertical columns.

11 Q. There are actually 6, 1 through 6 and 7 through
12 12 are not listed. Right?

13 A. Okay. Here we have one, A,B,C, 1, 2, 3, 4, 5,
14 6, 7, 8, 9 rows.

15 Q. I think we are mixing up rows and columns. Rows
16 vertically in your cell design are each given a letter
17 A through H. Right?

18 A. Can I talk now? Can I talk?

19 Q. I think we have to go with questions and
20 answers.

21 THE COURT: I think he was just trying to
22 clarify we're all on the same page. Do we currently
23 have a question pending?

24 Q. Here is the question: There are eight rows here
25 with A through H, and that covers all of the six

1 different cell lines that you analyzed. Right?

2 A. Excluding the control that has to be run with
3 it.

4 Q. Are you saying line I, the 9th line is the
5 control?

6 A. Line H is the control.

7 Q. Where does it say in your book that line H is
8 the control?

9 A. Each plate has to have a control; each
10 experiment has to have a control with it. These are
11 labeled cell lines treated, untreated, which are
12 ovarian cancer cells; untreated/treated normal ovarian
13 untreated/treated; and when she did the experiment,
14 she found out these are eight, and she needed to run
15 an additional line, which is a control, and that's the
16 H. So she did that, and she ran the I, which we call
17 the I here in another plate, and for raw data we put
18 it all together, so we could export it and analyze it.

19 Q. Take a look at your lab notebook and point out
20 to the Court that it says the methodology is to run
21 seven tests, then do a control, and then an eighth.
22 In other words, other than what you say just now, how
23 would one know that this row, Row H is meant to be a
24 control, and Row I, .225, is meant to be something
25 else?

1 A. Your Honor, Row I is not part of the plate
2 because the plate maximum capacity is 8 by 12.

3 Q. Here is the point. Let me ask you this. Let's
4 put up the demonstrative with the plate and the raw
5 data. When we draw numbers here from the raw data and
6 we place it into the reported data, do you see with me
7 the numbers from Row A, column 1, .1764 is placed here
8 in the reported data in row A, column 1? Can we agree
9 on that?

10 A. I agree.

11 Q. For the normal ovarian cancer untreated and
12 treated, the number that is drawn for the normal
13 ovarian cancer untreated .103 is drawn from Row H. Do
14 you agree with me there? .103 here, Row H, column 1
15 is reported as normal ovarian cancer untreated. True
16 or not true?

17 A. 0.13?

18 Q. 0.103 in the raw data is on the eighth row.
19 Correct?

20 A. Yes.

21 Q. And it is placed in the normal ovarian cancer
22 untreated cited line. Correct?

23 A. Yes.

24 Q. But here in your design, Row H is for treated
25 normal ovarian cells; is it not?

1 A. Okay. Yes, let me explain. It is not. She
2 designed and drawn the eight by six. That's 96. She
3 found out if she placed all these cells in the plate
4 down, you will not have a place for control. So what
5 she did, she excluded the last one, which is the
6 normal ovarian treated, and ran a blank with the
7 experiment. If you cannot run a blank with the
8 experiment, that's a problem. Then she ran another
9 plate with the treated ovarian cancer cells -- I'm
10 sorry, normal ovarian cells, and added the data to the
11 raw data and computed the calculations.

12 Q. Can we agree that what you just described, what
13 she noticed, what she added is not set forth at all in
14 your notebook?

15 A. It's obvious, like the maximum capacity of the
16 96 well plate, as you indicated, is only eight rows,
17 and we have eight samples, and we need a control. So
18 she decided to run the control with the seven samples
19 and run the other one in the next plate.

20 Q. Now, you say that the control is the eighth
21 sample and not the ninth. How do you know that?

22 A. Because I just answered you. It's eight lines.
23 Right? We have eight cells. So we have to remove one
24 cell in order to run the blank. That's what I'm
25 saying.

1 Q. Why couldn't she just put the blank in the ninth
2 cell?

3 A. There is no ninth cell.

4 THE COURT: You just said you did run a ninth
5 correctly. I'm going to have to stop this.

6 THE WITNESS: You are right.

7 THE COURT: Every minute we go on it gets more
8 confusing on this issue.

9 You said you ran seven, maybe the eighth one
10 in the control and the ninth ran that other plate.
11 Now you are telling me there is no such thing.

12 MR. WILLIAMS: Can we get to the punch line?

13 THE COURT: I'm lost.

14 MR. WILLIAMS: If we go to a demonstrative, I
15 think it will become clear to the Court. Can we put
16 up the demonstrative that has the plate design and the
17 raw data, both of them, please.

18 Here is the point. The untreated talc, if one
19 looks at the raw data, has higher values than the
20 treated talc. If you look at the raw data, this is
21 how it is depicted. And the added line has .225,
22 .2248, .2232?

23 In the reported data, the untreated talc has
24 lower values than the treated talc. But in the raw
25 data, the treated talc has lower values than the

1 untreated talc, unless what Dr. Saed is saying, this
2 ninth row was added -- the eighth row was used
3 suddenly as a blank, and the ninth is meant to depict
4 something different than the cell design.

5 THE COURT: That's what I'm trying to figure
6 out, what this ninth row is.

7 THE WITNESS: There is no ninth line. It's a
8 96 well plate.

9 THE COURT: What is that? There are numbers
10 put in there. There has to be something.

11 THE WITNESS: This is a demonstration of raw
12 data. That is not a demonstration of drawing a plate.

13 THE COURT: We'll go back to questions and
14 answers.

15 BY MR. WILLIAMS:

16 Q. Let me go back to the cell design. You agreed
17 with me earlier that the wells plate design indicated
18 that Row H, columns 1, 2 and 3 were for treated normal
19 ovarian cells and Row G was for untreated. We then
20 have raw data. And here the seventh row, Row G, has a
21 value, which according to your wells plate design,
22 should be for normal ovarian untreated. So let me ask
23 that question:

24 How can one tell by looking at the raw data
25 which of the cell lines it relates to?

1 A. My answer is that the first one is a
2 representation of what samples that will be tested,
3 that we will be testing. And when we did that, we
4 have two, four, six, eight samples. So we have eight
5 rows down. When we figured it out, we found we needed
6 to do a control. So she eliminated the last one and
7 ran it separately in another 96 well plate and
8 combined all the data together.

9 Q. Why not do a control with a ninth row?

10 A. There is no ninth row. You just said the
11 maximum you could get is a 96 well plate.

12 Q. Why do you pick in the raw data the control as
13 the second-to-last as opposed to the last row?

14 A. No, the control is the last row. The last row
15 in the 96 well plate. If you count, it will be H.
16 You made up I. I don't know where you got I from.

17 Q. You are testifying the last value here, .225 is
18 the control?

19 A. No. I'm testifying that H value is the control.

20 Q. And I is -- the ninth row is?

21 A. The ninth is another -- when we found out there
22 was no room for the sample to run, we ran it in
23 another 96 well pate, and we put the data here.

24 MR. WILLIAMS: Let me stop on this topic. I
25 have one other topic after this if I may.

1 Q. If you look at the lab notebook, other than what
2 is depicted on the screen with the 96 wells plate
3 design, which assigns a row and a column to each of
4 the different cell types, where in your lab book does
5 it describe how your assistant, your colleague is
6 going to use the control sample?

7 A. When you have eight samples to run and there is
8 no room for the control, the practice in our lab, to
9 eliminate the last sample and rerun it with another
10 plate. That's what we did.

11 THE COURT: You said the practice in your lab.
12 How would someone outside of your lab know that is
13 what is going on?

14 THE WITNESS: Because there is no space for it
15 on the plate.

16 Q. But there is space in your lab notebook for
17 someone to describe what your methodology would be so
18 that someone who is looking at this and trying to
19 replicate it can follow it. Right?

20 A. Correct.

21 Q. And there is no description that says, We're
22 going to go through seven. We're going to apply those
23 to each of the rows and columns that we've indicated
24 up above on the previous page in our cell design, but
25 when we get to the eighth, we are going to then run a

1 control and put that into the eighth line and going to
2 put the actual data later on --

3 A. Rerun another plate.

4 THE COURT: We understand that's what you are
5 saying. The question is --

6 THE WITNESS: It's not in the book, no.

7 THE COURT: We got the answer. Let's move on.

8 MR. LAPINSKI: Your Honor, can we take a
9 little break, please.

10 MR. WILLIAMS: I have two different topics.

11 THE COURT: Let's give the break now.

12 MR. WILLIAMS: It was my understanding we
13 would have double the time of the direct exam, so
14 double would be four hours for cross-examination.

15 THE COURT: You will. He's asking can we do a
16 break now. Remember he's under cross, and please
17 don't speak to your witness.

18 MR. LAPINSKI: I averaged about 3 hours
19 45 minutes, so if Mr. Williams is to finish up in
20 15 minutes with the next two topics he has, that's
21 fine.

22 THE COURT: All right.

23 THE DEPUTY CLERK: All rise.

24 (Recess is taken.)

25 (Continued on next page.)

1 THE DEPUTY CLERK: All rise.

2 THE COURT: Thank you.

3

4 **GHASSAN SAED**, resumed.

5

6 CROSS-EXAMINATION

7 BY MR. WILLIAMS (continued)

8 Q. Last topic, sir.

9 On DIRECT EXAMINATION you were asked some
10 questions about financial disclosures, and you
11 discussed the amount of money on cross-examination
12 that plaintiffs' counsel paid to you for your work.

13 First question: The amount paid to you by
14 plaintiffs' attorneys for writing the manuscript that
15 formed the basis for your report and your publication
16 was between 36,000 and 42,000 dollars. Correct?

17 A. I can't remember exactly.

18 Q. You initially submitted your manuscript to the
19 Journal of Gynecologic Oncology. Right?

20 A. Right.

21 Q. This is Exhibit A 38. Page 23.

22 It said the authors have no conflict of
23 interest to disclose. Correct?

24 A. Correct.

25 Q. By the time you submitted your original

1 manuscript to the Journal of Gynecologic Oncology,
2 plaintiffs' counsel paid you tens of thousands of
3 dollars for your work. Right?

4 A. Yes.

5 Q. Is there any doubt in your mind about that?

6 A. No.

7 Q. The statement you had no conflicts of interest
8 to declare was not true, was it?

9 A. It is true. I believe I have no conflict of
10 interest to declare because this work, your Honor, is
11 completely funded by my lab from my fund.

12 Q. You just said a moment ago your work was
13 completely funded by your lab. You were in fact paid
14 to write the manuscript; were you not?

15 A. I was paid for my time, extra time that I spent
16 doing the work for Beasley Allen. But the whole work,
17 all the lab supplies, everything I paid for from my
18 own lab.

19 Q. I'm sorry.

20 A. I paid for all the supplies from the lab and the
21 salary of my employees from the discretion fund of my
22 lab. So I believe I have no conflict of interest to
23 report. I reported, I disclosed my time that I spent
24 working with Beasley Allen in this case to my
25 university that I work for, and I don't see it as a

1 conflict of interest I should disclose.

2 THE COURT: Doctor, you were paid for, as you
3 put it, extra hours or overtime. I wasn't quite sure
4 what that meant because, in the academic field, I
5 don't think of it as overtime; but you were paid for
6 some of your hours in doing the manuscript. Correct?

7 THE WITNESS: Correct.

8 THE COURT: We have an answer. We could move
9 on.

10 BY MR. WILLIAMS:

11 Q. The revised version of your manuscript you sent
12 to the Journal of Reproductive Sciences included a
13 section entitled, "Conflict of Interest." Right?

14 MR. WILLIAMS: This is Exhibit B 14.

15 A. Which journal is this?

16 Q. This is the Journal of Reproductive Sciences.
17 There is a section called, "Conflict of Interest"; and
18 on page 14 it says:

19 "The corresponding author Dr. Ghassan Saed
20 acted as a consultant regarding this topic for a fee.
21 Otherwise, the authors declare there are no conflicts
22 of interest."

23 Is that what it said in the conflict of
24 interest statement?

25 A. Yes.

1 Q. You personally prepared the conflict of interest
2 section in the revised manuscript. Right?

3 A. What do you mean? I don't understand
4 "personally prepared."

5 Q. Did you, Dr. Saed, prepare the conflict of
6 interest section that appeared in the Reproductive
7 Sciences manuscript?

8 A. Yes.

9 Q. You did not identify who you consulted for.
10 Right?

11 A. Right.

12 Q. You did not disclose your consulting work in the
13 matter was ongoing?

14 A. I didn't need to.

15 Q. You did not make that disclosure?

16 A. I didn't need to disclose that.

17 Q. And you did not disclose that?

18 A. Sure.

19 Q. You did not disclose the fact you consulted in
20 litigation involving talc and ovarian cancer. Right?

21 A. Not here. Again, I said in my opinion I don't
22 have a conflict of interest, and I did this because I
23 was criticized by Johnson & Johnson lawyers not to put
24 that. So I said I'm not hiding anything. I will put
25 it.

1 Q. Can we agree that if you had not placed anything
2 in the conflict of interest disclosure, the journal
3 and peer reviewers who reviewed your manuscript would
4 not know you were being paid by plaintiffs' counsel to
5 write the manuscript?

6 A. I review papers for GYN Oncology. I review
7 papers for Reproductive Sciences. And I don't see
8 conflict of interest statements at all.

9 THE COURT: That wasn't his question. Let's
10 get to the bottom. This is why it is taking so long
11 today.

12 All he asked is, if you did not include this
13 conflict of interest statement, isn't it correct no
14 one would have been aware you had consulted with a law
15 firm involved in litigation on this topic. Isn't that
16 correct?

17 THE WITNESS: Yes, your Honor.

18 MR. LAPINSKI: What we are looking at is not
19 the final disclosure that appeared in the manuscript.

20 MR. WILLIAMS: I'm getting to that. I'm
21 almost done.

22 BY MR. WILLIAMS:

23 Q. After being deposed in this case in January of
24 2019, you made additional revisions to your conflict
25 disclosures. Right?

1 A. Yes.

2 Q. You revised the conflict statement. It is
3 Exhibit A 39, page 10. You revised the statement to
4 say:

5 "Dr. Saed has served as a paid consultant and
6 expert witness in the talcum powder litigation."

7 Correct?

8 A. Correct.

9 Q. Now, you also added a new financial disclosure
10 statement for the first time. Is that right?

11 A. This is because Johnson & Johnson lawyers --

12 THE COURT: Just answer the question.

13 A. Yes.

14 Q. If we could pull that up. This is on page A 39,
15 page 10. The statement read, under funding:

16 "The authors received no financial support for
17 the research, authorship and/or publication of this
18 article."

19 That's what you wrote. Correct?

20 A. Yes.

21 Q. That's not true, is it?

22 A. It is true.

23 Q. You received tens of thousands of dollars from
24 plaintiffs' counsel in connection with your work
25 actually writing the manuscript. Correct?

1 A. This is stating that paying for the research.

2 Q. Research, authorship and/or publication?

3 A. Expenses of publication, yes.

4 Q. Does it say expenses of publication?

5 A. That's what I meant.

6 Q. You understand authorship refers to writing. If
7 I'm an author of a book, I wrote the book. Can we
8 agree on that?

9 A. Yes.

10 Q. You were the author of the manuscript; were you
11 not?

12 A. Yes.

13 Q. You were paid to author the manuscript.
14 Correct?

15 A. For some part, yes.

16 Q. This funding disclosure says that the authors
17 received no financial support for the research,
18 authorship and/or publication. Right?

19 A. Okay.

20 Q. A person could come to the conclusion from
21 reading that funding disclosure that whatever Dr. Saed
22 was paid for pursuant to the other disclosure, at
23 least we know he wasn't paid to author or write this
24 manuscript. Right?

25 A. Possible.

1 MR. WILLIAMS: No further questions, your
2 Honor.

3 THE COURT: You took less than 15. Thank you
4 very much.

5 MR. LAPINSKI: Your Honor, can we have a short
6 break, just five minutes?

7 THE COURT: All right.

8 THE DEPUTY CLERK: All rise.

9 (Recess.)

10

11 REDIRECT EXAMINATION

12 BY MR. LAPINSKI:

13 Q. Dr. Saed, we're going to go back to the binder
14 that was plaintiffs' counsel's binder, and I want to
15 look at your deposition on pages 30 through 32,
16 please.

17 Doctor, you were asked earlier in regard to
18 your testimony at the top of page 32, the question
19 was -- starting at the bottom of page 31, line 24, the
20 question was.

21 "QUESTION: As of the time you received the
22 call from Ms. Thompson, what opinion did you have with
23 regard to talc and ovarian cancer?"

24 Do you remember being asked about that
25 question and your response to that question?

1 A. Yes.

2 Q. Before going to your answer, I would like to go
3 to page 30 of your deposition. Starting at line 9,
4 you were asked the question as to whether there is a
5 causal link between talc and ovarian cancer.

6 And if you see on page 30, line 11, through
7 13, what was your answer to that?

8 A. I said:

9 "My opinion, anything that causes inflammation
10 and redox imbalance is linked to increased risk of
11 ovarian cancer."

12 Q. Now, Doctor, with that in mind, when we go to
13 your answer on page 32, line 2, and your answer is
14 that "talc is a potential inducer of inflammation."
15 Correct?

16 A. Yes.

17 Q. After that you said it "induces and increases
18 the risk of ovarian cancer." Correct?

19 A. Correct.

20 Q. What did it refer to in that statement?

21 A. Inflammation.

22 Q. Doctor, you were asked questions about the
23 abstract that was submitted to SGO in March of 2019
24 and the fact that the submission to SGO made a
25 statement of testing for 48 hours. Correct?

1 A. Correct.

2 Q. I would like you to turn to your binder at the
3 back of the binder marked as PSC Saed Exhibit 3.

4 Doctor, let me know when you have that in
5 front of you.

6 A. Say that again.

7 Q. The exhibit is marked PSC Saed 3.

8 MR. LAPINSKI: Your Honor, if you would like,
9 I can hand a copy up to you.

10 Q. Doctor, can you please describe for me what that
11 exhibit is.

12 A. This is the abstract that we submitted to SGO
13 and it is presented by Dr. Harper. It induces a
14 pro-oxidant state in normal and ovarian cancer cells
15 through gene point mutations.

16 Q. Dr. Saed, is that the poster that you submitted
17 to SGO in March of 2019?

18 A. Yes.

19 Q. Is that the poster presented to SGO in March of
20 2019?

21 A. Yes.

22 Q. What are the hours that are noted on that poster
23 that was presented at SGO in 2019 as far as treatment
24 hours?

25 A. 72 hours.

1 Q. Doctor, does your research conclude that
2 Johnson's Baby Powder causes oxidative stress and
3 ovarian cancer?

4 A. Yes.

5 Q. Is it your opinion oxidative stress and
6 inflammation leads to ovarian cancer?

7 A. Yes.

8 Q. Is it your opinion that Johnson's Baby Powder
9 causes ovarian cancer?

10 A. Yes.

11 Q. Doctor, what are those opinions based upon?

12 A. It is based on all the results I established in
13 my laboratory and my 25 plus years of experience
14 characterizing the hallmark of ovarian cancer in
15 relation to -- specifically, in relation to oxidative
16 stress and inflammation and also in published
17 literature.

18 Q. Doctor, there were some questions that were
19 asked, and I'm not sure the record was clear, so I
20 want to go back and try to clarify it.

21 You were asked some questions as to what was
22 written first, the manuscript that you submitted to
23 Gynecologic Oncology or the report you submitted in
24 this litigation. Could you just clarify which was
25 written first, your manuscript or your expert report

1 in this litigation?

2 A. I believe the report first.

3 Q. The report first that you submitted in November?

4 A. I think November, and the manuscript was in --
5 I'm not good on dates.

6 Q. Doctor, take a look, if you would, at first the
7 exhibit that's in your binder, which is your expert
8 report. What's the date of that expert report?

9 A. November 2018.

10 Q. Doctor, do you recall when it was that you
11 submitted the manuscript to Gynecologic Oncology?

12 A. August 2018.

13 Q. Doctor, does that refresh your recollection as
14 to which was written first, the manuscript or the
15 expert report?

16 A. Yes.

17 Q. Which was written first, the manuscript or the
18 expert report?

19 A. The manuscript.

20 Q. Doctor, going back to the testimony that we just
21 went through in regard to cell proliferation. Is it a
22 generally accepted practice to leave a blank on a
23 plate?

24 A. Add a blank to a plate, planning experiment?

25 Q. Yes.

1 A. Yes.

2 Q. Doctor, if someone wanted to, could they
3 replicate your studies based upon the description in
4 your manuscript?

5 A. Yes.

6 Q. Doctor, some of the research you did in regard
7 to Johnson & Johnson's Baby Powder dealt with CA-125.
8 Right?

9 A. Yes.

10 Q. What is the relevance of CA-125 in your
11 experiments?

12 A. CA-125 is a cancer antigen marker; and if it is
13 increased, and it is increased when cells are exposed
14 to Johnson & Johnson Baby Powder. That is very
15 significant. It's a cancer antigen marker.

16 Q. The research you did regarding Johnson's Baby
17 Powder was in vitro?

18 A. Yes.

19 Q. Doctor, are doses in in vitro studies used to
20 predict exposure in humans?

21 A. No.

22 Q. Why is that?

23 A. Because in concrete studies is a completely
24 different environment; and also the cells you are
25 dealing with 100 percent of the same type of cells in

1 one concentration. In the human body it is all over.

2 Q. Doctor, if you would in your binder, turn to
3 Exhibit G in your binder. It is PSC Saed OP Exhibit
4 G. And if you would, Doctor, if you could turn to
5 page 20.

6 Doctor, what is that on page 20 that we are
7 looking at?

8 A. CA-125 --

9 Q. Take a look on the screen and make sure you are
10 looking at the right page.

11 A. Oh, this is the plan of the experiment that we
12 did using Johnson & Johnson Baby Powder looking at
13 different doses -- 5, 50, 100 micrograms per
14 milliliter for 72 hours; and these are the lists of
15 all cells that we used in the study, and they are each
16 cell line treated, untreated with different doses
17 giving an ID.

18 Q. Doctor, what's the significance of the ID number
19 that's next to each cell line?

20 A. The ID is what is transported into the
21 electronic data.

22 Q. Doctor, if we were to go to your electronic data
23 and we were to look at your electronic data, would we
24 be able to correlate each cell line based upon the ID
25 number with the data that's in your chart?

1 A. Yes.

2 Q. Doctor, while there is a lot of cross-outs on
3 here, which makes us think white-out may be good
4 sometimes, is it clear here, Doctor, you have your six
5 different cell lines, and for your six different cell
6 lines you have the different amount of treatment?

7 A. Yes.

8 Q. If we could look at the top of that page,
9 Doctor, what's the treatment time associated with all
10 of those cell lines?

11 A. 72 hours.

12 Q. Doctor, when was it that that was treated?
13 What's the date on that page, Doctor?

14 A. February 1st.

15 Q. Doctor, the experiments you did related to
16 Johnson's Baby Powder, if we flip now to Exhibit H in
17 the binder.

18 First of all, Doctor, can you identify for me
19 what Exhibit H in the binder is?

20 A. This is the description of the beginning of the
21 experiment using only Johnson & Johnson Baby Powder
22 with the identification of the lot number and the cell
23 line.

24 Q. Doctor, if you would flip to the third page,
25 which is page No. 32, that also has Bates No. Saed

1 000003. Doctor, what is that spreadsheet that's shown
2 on that page?

3 A. This is the spreadsheet with the sample ID which
4 corresponds to the same ID you just showed which we
5 treated with the different doses with Johnson &
6 Johnson Baby Powder for 72 hours.

7 Q. Doctor, were all of the samples that you used in
8 the Johnson's Baby Powder study those samples
9 identified there treated for 72 hours?

10 A. Yes.

11 Q. Doctor, you were able to confirm that in your
12 lab notebook?

13 A. Yes.

14 Q. Doctor, in order for you to reach the
15 conclusions that you reached and you are expressing in
16 your expert report, was it necessary to compare the
17 dose that you used in in vitro studies with an amount
18 equivalent to human exposure?

19 A. No.

20 Q. Why is that?

21 A. In vivo human studies are completely different.
22 It needs a different setup.

23 Q. Doctor, do you need animal studies to support
24 the opinions you are offering in this case?

25 A. No.

1 Q. Doctor, the final manuscript that you published
2 in Reproductive Sciences in February of 2019, did that
3 final manuscript correctly reflect the fact that the
4 Johnson's Baby Powder, that the cell lines that were
5 treated with Johnson's Baby Powder were treated for
6 72 hours?

7 A. Yes.

8 Q. Dr. Saed, you were asked several questions in
9 regard to white-out that was in your laboratory
10 notebook. Do you recall that?

11 A. Yes.

12 Q. Dr. Saed, the questions that were asked about
13 the white-out were questions for the most part in
14 regard to the section of your notebook that has been
15 marked as PSC Saed OP Exhibit I. Correct?

16 A. Yes.

17 Q. Dr. Saed, in addition there were some white-outs
18 in the section that was marked as PSC Saed OP Exhibit
19 G. Correct?

20 A. Yes.

21 Q. Were those sections of the laboratory notebook
22 performed before you started doing your testing on
23 Johnson's Baby Powder?

24 A. One more time, please.

25 Q. Sure. Exhibit I and Exhibit G, which are copies

1 of the first two sections of your laboratory notebook,
2 do those two sections of the laboratory notebook
3 pertain to work that you did on talcum powder before
4 you started your experiments on Johnson's Baby Powder
5 that form the substance of the manuscript that you
6 published?

7 A. Yes.

8 Q. Dr. Saed, there was note made of the fact that
9 on one of the pages of your laboratory notebook in
10 Exhibit H, specifically, page 53 of that notebook,
11 which is Bates stamp number Saed 000025, that there
12 was white-out and Johnson & Johnson was written on top
13 of the white-out. Do you recall that?

14 A. Yes.

15 Q. Dr. Saed, how were you able to confirm Johnson's
16 Baby Powder was in fact used for all of your
17 experiments that start in Exhibit H?

18 A. This Exhibit H is everything we used in this
19 exhibit where we published the manuscript. It is all
20 done with Johnson & Johnson Baby Powder.

21 Q. How are you able to confirm that, Doctor? Flip
22 to the first page of Exhibit H, if that will assist
23 you.

24 A. If you go to the first page, your Honor will see
25 that. Everything in this section is done with this

1 powder.

2 Q. Doctor, you were asked questions about work that
3 you performed that was later added to your laboratory
4 notebook. Do you recall those questions?

5 A. Yes.

6 Q. Doctor, any of the data that was run related to
7 your experiments on Johnson's Baby Powder, was the
8 data run prior to your writing and submitting your
9 manuscripts for consideration to Gynecologic Oncology?

10 A. Before we submit, of course.

11 Q. Was all of the data related to Johnson's Baby
12 Powder and the results that you found and submitted as
13 a manuscript to Reproductive Sciences run and analyzed
14 before you submitted the manuscript?

15 A. Yes.

16 MR. LAPINSKI: I have no further questions.

17 MR. WILLIAMS: No questions, your Honor.

18 THE COURT: Thank you. You are excused,

19 Doctor.

20 (Witness excused.)

21 THE COURT: Okay. 9:30 tomorrow morning.

22 THE DEPUTY CLERK: All rise.

23 (Court adjourned at 6:10 p.m.)

24 ///

25

I N D E X

Proceedings

Page

WITNESSES

Direct Cross

Redirect Recross

Ghassan Saed

Mr. Lapinski

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Mr. Williams

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C E R T I F I C A T E

PURSUANT TO TITLE 28, U.S.C., SECTION 753, THE
FOLLOWING TRANSCRIPT IS CERTIFIED TO BE AN ACCURATE
TRANSCRIPTION OF MY STENOGRAPHIC NOTES IN THE
ABOVE-ENTITLED MATTER.

S/Vincent Russoniello
Vincent Russoniello, CCR
Certificate No. 675

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